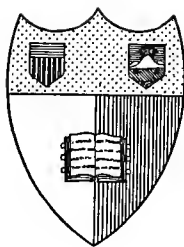


THE A B C OF THE FEDERAL RESERVE SYSTEM

• EDWIN WALTER KEMMERER •



New York
State College of Agriculture
At Cornell University
Ithaca, N. Y.

Library

Cornell University Library
HG 2563.K4

The ABC of the federal reserve system; wh



3 1924 014 549 566

mann



Cornell University
Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

**THE A B C OF THE FEDERAL
RESERVE SYSTEM**

THE A B C OF THE FEDERAL RESERVE SYSTEM

WHY THE FEDERAL RESERVE SYSTEM WAS
CALLED INTO BEING, THE MAIN FEATURES
OF ITS ORGANIZATION, AND HOW IT WORKS

BY

EDWIN WALTER KEMMERER, PH.D.

PROFESSOR OF ECONOMICS AND FINANCE
IN PRINCETON UNIVERSITY

With a Preface by

BENJAMIN STRONG, LL.D.

GOVERNOR OF THE FEDERAL RESERVE BANK OF NEW YORK

THIRD EDITION

PRINCETON UNIVERSITY PRESS
PRINCETON, N. J.

LONDON: HUMPHREY MILFORD
OXFORD UNIVERSITY PRESS

1919

©
HG 2563
N 4
1919

PRINCETON UNIVERSITY PRESS
Princeton, N. J.

Published September, 1918

Revised December, 1918

Revised March, 1919

Second printing April, 1919

Third edition, November, 1919

Printed in the United States of America

16858

CONTENTS

	PAGES
PREFACE. By BENJAMIN STRONG	ix-xiii
CHAPTER I	
PURPOSE AND PLAN	1-2
Lack of familiarity with federal reserve system on part of public, and its dangers, 1.—Purpose of book, 2.—Plan of book, 2.	
CHAPTER II	
DECENTRALIZATION OF AMERICAN BANKING PRIOR TO FEDERAL RESERVE SYSTEM	3-7
Banks lacked organization and effective leadership in time of crisis, 3-4.—Reserves widely scattered, 4-6.—Reserves immobile, 7.	
CHAPTER III	
INELASTICITY OF AMERICAN BANK CREDIT PRIOR TO FEDERAL RESERVE SYSTEM	8-18
Extent to which bank credit is used as a medium of exchange, 8-10.—Why circulating bank credit should be elastic, 10-11.—Bank-note inelasticity over long periods under old banking system, 11-13.—Seasonal inelasticity of bank notes, 13-15.—Bank-note inelasticity in times of crisis, 15-17.—Inelasticity of deposit credit, 17.—Evil results of credit inelasticity, 18.	
CHAPTER IV	
DEFECTIVE EXCHANGE AND TRANSFER SYSTEM	19-24
The "float" and the practice of routing checks, 19-21.—Checks in transit commonly counted as legal reserve money, 21-22.—Large domestic shipments of currency required under old banking régime, 22-23.—Foreign exchange difficulties, 23-24.	
CHAPTER V	
DEFECTIVE BANKING MACHINERY FOR FEDERAL GOVERNMENT.	25-27
Difficulty of apportioning government funds among nine sub-treasuries and over fifteen hundred depository banks, 25-26.—Four evil results of practice, 26-27.—Summary of defects of old banking system, 27.	

CHAPTER VI

HOW THE FEDERAL RESERVE SYSTEM IS REMEDYING THE OLD
EVIL OF THE DECENTRALIZATION OF AMERICAN BANKING.. 28-49

Division of country into twelve federal reserve districts, 28-29.—Membership in federal reserve system, 29-31.—Democracy of federal reserve banks' plan of organization, 31-33.—Coordination of twelve federal reserve banks and centralization of their control provided for by means of federal reserve board, advisory council, and class C directors of federal reserve banks, 33-35.—District centralization of bank reserves, 35-38.—Mobilization of reserves, 38-39.—Inter-district mobility of reserves, 39.—Rediscounting by one federal reserve bank for another, 39-42.—Open-market operations, 42-44.—Creation of a broader discount market for commercial paper, 44-45.—Increasing use of the trade acceptance, and advantages of trade acceptance over open-book account credit, 45-46.—The bank acceptance, 46-48.—Inter-district mobility of reserves promoted by increasing use of trade acceptances and bank acceptances, 47-48.—Intra-district mobility of reserves increased by federal reserve system, 48-49.

CHAPTER VII

CREDIT ELASTICITY UNDER THE FEDERAL RESERVE SYSTEM.... 50-65

Provisions of federal reserve act for bond-secured national bank notes, 50-51.—The federal reserve bank note, 51.—Federal reserve notes, 51-52.—Their elasticity, 52-57.—Elasticity of deposit currency obtained in a number of ways: Removal of old rigid legal reserve requirements, 58. New legal reserve requirements less rigid and may be suspended in times of emergency, 58-61. Privilege of rediscounting at federal reserve banks, 61-62. Privilege of borrowing on collateral notes with short maturities, 63.—Contractility of circulating credit under federal reserve system, 64-65.

CHAPTER VIII

DOMESTIC AND FOREIGN EXCHANGE UNDER THE FEDERAL RESERVE SYSTEM 66-81

Provisions of federal reserve law concerning domestic exchange, 66-69.—Early experiments of the federal reserve authorities as regards the clearing and collection of checks, 69.—Present clearing and collection system, 70-75.—The gold settlement fund, 75-78.—Foreign exchange under the new banking system, 79-81.

CONTENTS

vii

PAGES

CHAPTER IX

THE FEDERAL RESERVE SYSTEM AND THE FEDERAL TREASURY.. 82-90

Federal reserve banks authorized by law to be depositaries of government funds, 82-83.—Extensively used as depositaries by Secretary of the Treasury, 83-87.—Federal reserve banks as fiscal agents of Government render invaluable services in the financing of the war, 88.—President Wilson's appeal to non-member banks to join federal reserve system as a matter of patriotic duty 88-90.

APPENDIX A

COMBINED BALANCE SHEET OF TWELVE FEDERAL RESERVE BANKS AS OF MARCH 28, 1918, AND BRIEF EXPLANATIONS OF THE VARIOUS ITEMS..... 91-95

APPENDIX B

FEDERAL RESERVE ACT AS AMENDED TO MAY 1, 1918, WITH A MARGINAL INDEX AND WITH CITATIONS OF AMENDATORY ACTS 96-164

APPENDIX C

PROVISIONS OF THE FARM LOAN ACT, APPROVED JULY 17, 1916, WHICH AFFECT FEDERAL RESERVE BANKS AND MEMBER BANKS OF THE FEDERAL RESERVE SYSTEM 165-167

APPENDIX D

SECTION 7 OF "AN ACT TO AUTHORIZE AN ISSUE OF BONDS TO MEET EXPENDITURES FOR THE NATIONAL SECURITY AND DEFENCE, . . . APPROVED APRIL 24, 1917, WHICH AFFECTS FEDERAL RESERVE BANKS AND MEMBER BANKS OF THE FEDERAL RESERVE SYSTEM" 168-169

APPENDIX E

THE "PITTMAN ACT" OF APRIL 23, 1918, WHICH PROVIDES FOR THE SUBSTITUTION OF FEDERAL RESERVE BANK NOTES FOR SILVER CERTIFICATES 170-174

INDEX TO FEDERAL RESERVE ACT AND ITS AMENDMENTS.....175-187

INDEX TO TEXT OF BOOK 188-192

PREFACE

By

BENJAMIN STRONG, LL.D.

Governor of the Federal Reserve Bank of New
York

The federal reserve banks came into being in the month of November, 1914. The passage of the legislation by which they were created had been preceded by five years of discussion, following the financial upheaval of the fall of 1907, such as might have been expected to prepare the way for the considerable changes in banking methods contemplated by the new law.

Notwithstanding, however, that American bankers had gained a better understanding of the deplorable defects in the American banking and currency system, the managers of the new federal reserve banks soon found that the welcome accorded to them by the banks of the country was, to say the least, cool. Business men generally welcomed the change for the better, recognizing the protection which the reserve system afforded them; but nevertheless both bankers and

business men were regrettably ignorant of what it all meant.

It was the influence of the war which demanded that the federal reserve banks be organized as promptly as possible. The best banking machinery and the best banking talent in the country seemed to be required to protect the interests of both bankers and business men. Much was expected from the new system, once it was started. Very shortly, however, immense imports of gold from abroad, general business prosperity stimulated by war profits, and reasonably comfortable conditions in credit and banking, appeared to put the federal reserve banks for the first two and one-half years of their existence into the class of expensive luxuries; in fact, they were regarded as examples of governmental interference with business which were tolerated but, nevertheless, were not appreciated by many bankers.

During this interval, November, 1914, to April, 1917, the system, by slow stages of progress, found itself. The machinery for conducting actual operations was designed and developed far beyond the requirements of the moment. The terms of the Act were perfected where need was discovered, the men engaged in the work became better acquainted with their duties and with each

other, skilled clerks were engaged and trained, and accounting methods were perfected, so that when the test came as a result of our entry into the war, in April, 1917, the Federal Reserve banks were in large measure prepared for the grave tasks and responsibilities at once to be assumed.

During the first twelve months of our country's participation in the war the reserve system became established upon a basis of confidence and respect, even in fact of admiration, among both bankers and business men; and its future therefore seems assured so long as good management deserves the support now enjoyed.

During these four years, however, the work of organization, and during the last year and a half the work assumed by the Federal Reserve banks as fiscal agents of the Government, have so occupied the time of all connected with the system that it has been difficult to overcome, in a comprehensive way, much of the ignorance and misunderstanding of the functions of the system. It is widely accepted as successful and necessary, but, with some exceptions, it is still hardly possible to say that it is understood. It has come as an enlargement of the scope of a great banking machine which had become complicated by the dual development of two classes

of banks, national and state; and, in the case of state banks, a development which covered a vast field of business activity not confined to commercial banking. Under the influence of the new system of twelve closely allied banks of reserve and of discount, the tendency will be toward unification and simplicity which will be brought about by the state institutions, in increasing numbers, becoming stockholders and depositors in the reserve banks.

Until, however, through evolution in methods and many changes in both state and national laws, we have a truly unified system, banking in this country will be a puzzle and a mystery to the casual observer, to the business man, and to bankers abroad, unless its various features are presented in a concise and comprehensive form, stripped of the technicalities of economic discussion. It is much more difficult to present a complex problem in concise form than in extended detail. This task, however, Professor Kemmerer has undertaken with distinct success. An account of the functions assumed by the federal reserve banks as fiscal agents of the United States Government, and of the handling of war bonds, certificates of indebtedness and government funds would have complicated, and, possibly, rendered less clear the description of the

position the federal reserve system occupies in the banking field. It would have involved, further, a discussion of the long felt necessity for a modification of the independent treasury system. These subjects, therefore, have properly not been enlarged upon.

It is a public service to undertake the difficult task of preparing an account of this great change in our fiscal system so as to combine accuracy with a comprehensive survey of the subject and, at the same time, to avoid technical details. All that is required to give the reader an understanding of the fundamentals of the new régime of American banking is contained in the following pages, which will be read with attention and interest by many who have been seeking this information during the past five years.

THE A B C OF THE FEDERAL RESERVE SYSTEM

CHAPTER I

PURPOSE AND PLAN OF BOOK

This book is an attempt to set forth in non-technical language the chief reasons why the federal reserve system was called into being, the main features of its organization, and how it works. Although the federal reserve act of 1913 is one of the most important pieces of financial legislation enacted in modern times, and although it has been in operation several years, comparatively few people are familiar with its elementary principles. It is looked upon by the majority of people as too technical and complicated a matter to be understood by persons other than bankers and economists. As a consequence there has been a surprising lack of public interest in the workings of the system and in the important legislative and administrative modifications which the system has undergone since its establishment. This unfamiliarity is not surprising when one considers the complex character of much of the

federal reserve machinery and the technical language in which this machinery is usually described. In a democracy, however, widespread ignorance, among the voters, of the country's financial system is fraught with danger.

America's leading manufacturing, transportation and commercial concerns years ago attained heights of economic efficiency which made them the envy of foreigners. None, however, envied us our banking system. None followed it except soon regretfully to turn back. This was true, despite the fact that our old American banking system had many substantial merits. It was reasonably safe, it yielded good profits, it was adaptable to the local needs of widely varying communities, and it developed the check and clearing system to a degree of perfection found in few if any other countries. Along with these meritorious features, however, it contained a number of very serious defects. The chief of these may be grouped conveniently under four heads: I. Decentralization. II. Inelasticity of credit. III. Cumbersome exchange and transfer system. IV. Defective organization as regards relationship with federal treasury. In the four succeeding chapters these four groups of defects will be considered, and in the following four chapters will be discussed the respective remedies provided by the federal reserve system.

CHAPTER II

DECENTRALIZATION OF AMERICAN BANKING PRIOR TO FEDERAL RESERVE SYSTEM

In 1912 the United States had many times more commercial banks than any other country in the world, and these banks averaged much smaller than those of any other important country. Official figures at that time placed the number of independent banking establishments of all kinds in the United States at approximately 30,000, and of this number something like 28,000 were banks whose business was wholly or partly of a commercial character. These commercial banks were owned for the most part by the residents of the communities in which they were placed, and the business of most of them was chiefly local in character. The great majority of national banks were national in nothing but name. Except for the rather loose association of the banks in the clearing houses of our principal cities and a growing community of interest, most of these banks were independent units, each working for itself. There was little team work. In

times of threatened panic the different parts of the system worked at cross purposes. They were without effective leadership at those times when prompt cooperation under national leadership was urgently needed.

Reserves Scattered

The most serious feature of this decentralization was the scattering of reserves. Thirty thousand different banks meant 30,000 cash reserves, and these reserves for the commercial banks were more than the mere "till money" which the "cash balances" of most foreign banks represent. They were actual reserves, substantial in amount, upon which the banks placed their prime dependence for times of emergency. It is true that most banks had so called "deposited reserves," namely, funds on deposit in other banks, which they were allowed to count as part of their "legal reserves"; and they had so called "secondary reserves," namely, funds invested in securities and call loans, which were supposed to be quick assets that could be liquidated at once in time of need. Strictly speaking, however, neither of these "reserves" was a reserve at all. The deposited reserve was after all merely a deposit in another bank, which the depository bank loaned out—commonly at call on the stock exchange—and

against which it held its own reserve, a reserve which in turn was often further attenuated by being placed on deposit in a third bank, there again to be loaned out on stock exchange collateral. In times of emergency, therefore, the "deposited reserve" could be realized upon only to the extent that call loans could actually be called, and this meant to the extent that stock exchange securities could be sold. Invested "secondary reserves" could be realized upon, likewise, only to the extent that securities could be sold. In times of threatened panic, however, stocks and bonds can not be sold on any extensive scale except at great sacrifices and at the risk of financial collapse. Experience has shown that securities are not sold to any large extent by banks at such times. The losses involved would be too great. The result was that in times of serious danger the banks of the country were forced to rely to a very large extent upon their own cash reserves, which, as a consequence, had to be maintained at a high level—higher than in other advanced countries. This situation gave the vault reserve in American commercial banks an importance not found in the commercial banks of Europe. European joint-stock banks normally carry little cash in vault; they place their reliance for emergency funds directly or indirectly upon the

central banks. In America bank reserves were so scattered and so jealously guarded that in times of threatened panic they were comparatively ineffective in staying the storm. The situation was analogous to what would happen today if after drilling our American army to a high point of fighting efficiency, we should scatter the men in small units all over the United States to protect the country from a threatened invasion. Each community would be jealous of its own squad of soldiers, but the invader would come and the efficiency of our well drilled soldiers would be practically nil. The point of the illustration will be clear to everyone recalling the mad scramble for reserve money on the part of banks throughout the country at the time of the panic of 1907. Our supply of reserve money was large. In fact we had at that time in the United States the largest supply of gold in the world. It was ineffective, however, because widely scattered; hence, suspension of cash payments throughout the country, currency premiums, the breakdown of our domestic exchanges, the illegal issue of millions of dollars of money substitutes, and all the other disgraceful accompaniments of an American panic.

Reserves Immobile

Obviously a country's reserve money must to a large extent be concentrated in one reserve or, at most, in a few large reserves, if it is to be effective. It must be marshalled in armies, not scattered in small squads. But these armies must be mobile so that they can be quickly moved singly or in combinations to places of threatened attack. An army's mobility is a big factor in its efficiency—a truth which the great mobility of the armies of the Central Powers in the recent war has emphasized. Our American bank reserves were not only scattered, they were also immobile. There was no effective way of quickly gathering them together and massing them at the points of financial danger.

These then were the three most serious phases of our banking decentralization: (1) Absence of a responsible national conservator of our money market, like the Bank of France or the Bank of England. (2) Scattered bank reserves. (3) Immobile bank reserves.

CHAPTER III

INELASTICITY OF AMERICAN BANK CREDIT PRIOR TO FEDERAL RESERVE SYSTEM

The second group of defects of the old banking system, defects closely related to those of decentralization, were those of credit inelasticity. A very large part of the country's current business is carried on by means of funds borrowed from commercial banks. These borrowed funds are left on deposit with the banks, and the deposits are circulated by means of checks, the debits and credits of individual accounts being offset in such a way that the total commercial deposits of the country do not normally vary greatly in short periods of time.

Extent to which Bank Credit is Used as a Medium of Exchange

The point may be illustrated by a few figures, and, inasmuch as conditions have been very abnormal since the outbreak of the European War, the figures used will be those for the year 1913. Reports made to the Comptroller of the Cur-

rency show that on June 4, 1913, the loans and discounts of commercial banks which reported to the Comptroller (exclusive of loans classified as real-estate loans) amounted to approximately $8\frac{1}{4}$ billion dollars. Estimates made by Professor Irving Fisher give a rate of deposit turnover for the United States in 1913 of approximately 54, which means that for each check-deposit balance, maintained in a commercial bank, averaging throughout the year \$1,000, approximately \$54,000 in checks were drawn and paid. The average deposit balance of $8\frac{3}{4}$ billions dollars would mean therefore check transactions to the extent of 54 times $8\frac{3}{4}$ billions dollars or 472 billions dollars in 1913. Investigations made for the National Monetary Commission in 1909 by Professor David Kinley showed that between 80 and 85 per cent of the country's total business was transacted by means of checks. If we accept the latter figure as the more representative one for 1913, we arrive at 83 billions dollars (namely, $15/85$ of the amount of business done by means of checks), as the amount of business in that year performed by means of cash. In June, 1913, of the total amount of money in circulation in the United States, 21 per cent, or \$716 millions consisted of bank notes. Although from the public's point of view bank notes are money, from

the issuing bank's point of view they are a form of bank credit. If we treat them as a form of bank credit, and add to the \$472 billions of check business 21 per cent of the \$83 billions of money business we arrive at approximately 490 billion dollars worth of business in 1913, representing 88 per cent of the country's total business transactions, as the amount performed by means of bank credit—checks and bank notes.

The amount of money and of deposit currency which a country needs to carry on its business, at a price level in equilibrium with the price levels of other countries, depends largely upon the amount of business or of money work to be done. In years of active business a larger supply of circulating media is needed than in years of business depression. Furthermore, in a country like the United States, in which agriculture is a particularly important industry, there are very pronounced seasonal fluctuations in the amount of business to be done, and consequently in the demand for cash and for deposit currency. One important postulate of a good banking system is its capacity to adjust the supply of deposit and bank-note currency to variations in trade demands, increasing it, for example, at the time of the heavy crop-moving demands in the fall and reducing it at the time of the period of inactive

business, which normally sets in shortly after the opening of the new year. Capacity to contract the circulating media when business demands decline is as important as capacity to expand them when these demands increase.

Under the old régime our American bank credit, both note and deposit, was peculiarly inelastic, although the seasonal character of much of the country's business is such as to make credit elasticity a desideratum of unusual importance in the United States.

Bank-Note Inelasticity

Our national bank notes, which should have furnished the elastic element in the country's hand to hand money, were notoriously inelastic. National banks were authorized to issue these notes by depositing with the Government United States bonds equal in par value to the notes issued.¹ The banks were supposed to realize a "double profit" on the bank notes, namely, interest on the bonds, and interest on the notes when they were loaned out as money. After 1900 the bonds used, however, were mostly two per cent bonds of 1930, and as the issue of bank notes

¹ If the market value were below the par value, additional bonds were to be deposited so as to make the market value at least equal to the notes issued. In recent years the market value of these bonds has been usually above the par value.

involved a number of incidental expenses, including a semiannual tax of one-fourth of one per cent upon the amount of notes issued, the double profit was usually not a very substantial one. Inasmuch as not more than \$100 in notes could be issued against \$100 par value of bonds regardless of how high a premium the bonds bore in the market, and inasmuch as the bonds had been in recent years practically always at a substantial premium, the banks usually realized considerably less than $1\frac{1}{2}$ per cent net interest on the bonds. Obviously the higher the premium paid on the bonds, other things equal, the lower the net interest yield; and the lower the premium, the higher the yield. The result was a tendency for the banks to increase their bank-note circulation when the price of bonds declined and to decrease it when the price rose. In other words, the expansion and contraction of the bank-note circulation was not, as it should have been, in response to variations in trade demands, but in response to variations in the price of the government debt. This often gave an inverse elasticity, since the price of government bonds often declined at times when business was slack and the currency was already redundant, and often rose at times when business was active and an increase in the bank-note circulation was desirable. In other

words, the bank-note circulation frequently declined at just the time when business needs demanded an increase, and increased when the business situation called for a decline. The character of these fluctuations will be seen from the following chart.²

From season to season the bank-note circulation was very irresponsive to varying trade demands. There was considerable delay and red-tape involved in obtaining the necessary bonds, depositing them at Washington and obtaining bank notes for circulation; and these obstacles, together with the expenses involved and the restrictions upon the subsequent retirement of notes once issued,³ made it impracticable for banks to meet temporary needs for additional currency, like those of the crop-moving period, by issuing additional notes. About all that can be said favorable to the seasonal elasticity of the national bank notes is that banks intending to increase permanently their bank-note circulation tended to make the increase in the fall when the demands for currency were normally largest. In the matter of seasonal elasticity our national bank-note

² Figures plotted on the chart do not include the issues of Aldrich-Vreeland emergency notes. See note 4, page 15.

³ Down to May 30, 1908, the law limited the amount of national bank notes that could be withdrawn in any one calendar month to \$3,000,000. On that date the law raised the limit to \$9,000,000.

CIRC.

PRICE

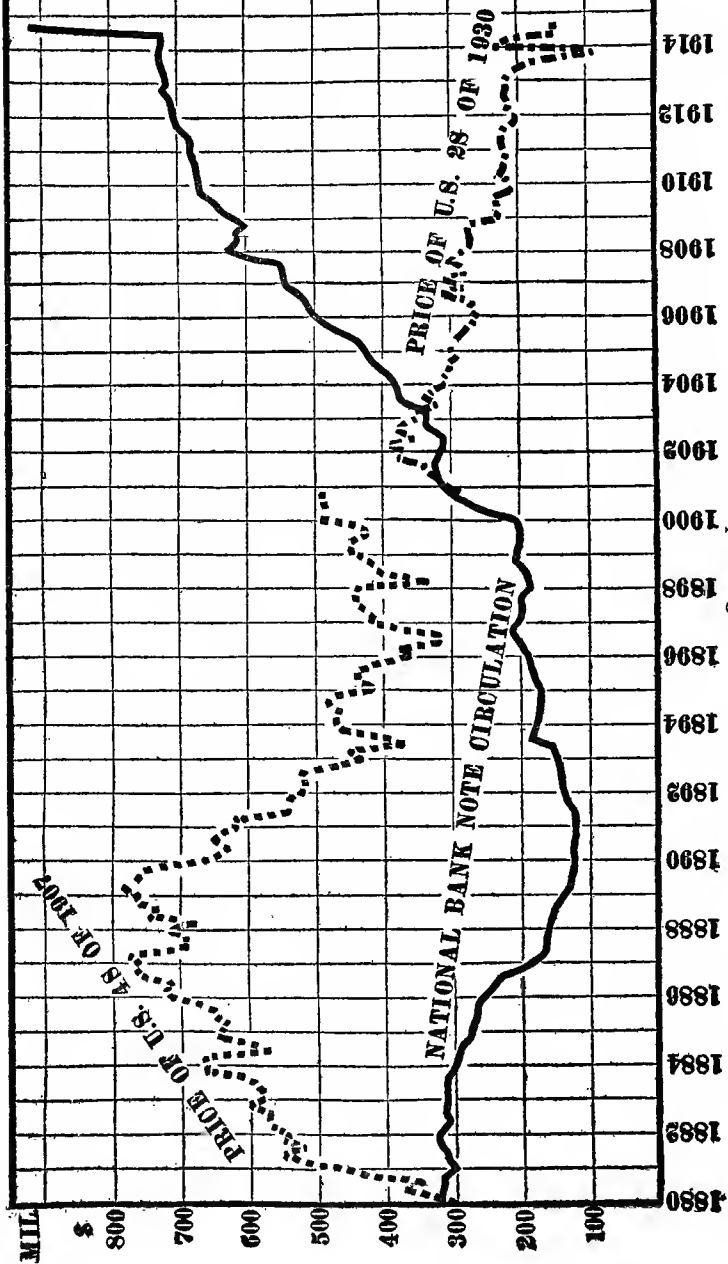


CHART I

National Bank-note Circulation and Prices of United States Bonds, Dates of Comptroller's Calls 1880-1914

circulation showed up very unfavorably in comparison with the bank-note circulation of Canada, which, under the system of branch banks and an asset bank-note currency, was highly responsive to seasonal variations in currency needs. The contrast will be made clear by the following chart (*Chart II*) showing the variations in the monthly bank-note circulation of the two countries prior to November, 1914, the date when the federal reserve banks were opened.⁴

In times of crisis national bank notes could not be depended upon to provide additional currency. Government bonds were usually difficult to secure on favorable terms at such times, and the machinery for taking out new circulation worked too slowly. Some progress was made in the direction of improving the old system in this regard during the latter years of the old régime; and, under the spur of strong appeals to the banks and active assistance from the Treasury Department, there was some helpful increase in the national bank-note circulation at the times of the panic of 1907 and the crisis of 1914. At best, however,

⁴ The figures plotted on the chart do not include the circulation of the so-called Aldrich-Vreeland emergency notes, which were first issued in August, 1914, reached their maximum in October, and were all retired by the following July. Legal authority to issue such emergency notes expired by limitation June 30, 1915. Federal Reserve Act, section 27.

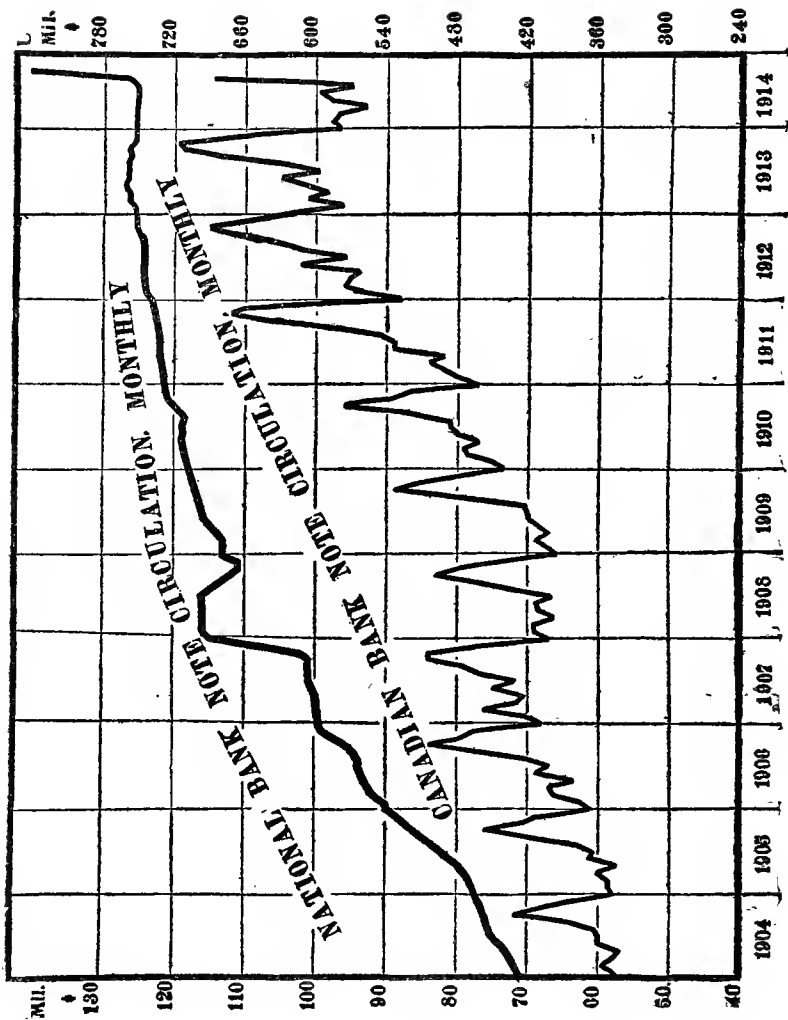


CHART II

Elasticity of Bank-note Circulation in United States and Canada 1904-1914

the bond-secured notes were a weak reed to rest upon in time of crisis.

Inelasticity of Deposit Credit

Our loan and deposit credit was likewise deficient in the quality of elasticity. Rigid legal minima for bank reserves set up an obstacle to loan and deposit expansion at times of increasing business activity. Banks which were "loaned up" and could not make further advances to regular customers of good standing were prevented from loaning their credit to these customers by accepting bills, which the customers might draw upon them, as is the common custom in Europe, because our courts had ruled that bank acceptances were illegal. The rediscount business among our banks was almost negligible, and most of that which existed was done on the quiet and under cover. Rediscounting was frowned upon by bankers and business men, and there was no central institution like the central banks of Europe, whose business it was to rediscount the paper of other banks in times of need. Our American commercial paper was largely local paper and we had comparatively little that could be sold in distant markets, either at home or abroad. In other words, rigidity rather than elasticity was a characteristic feature of our American deposit credit.

Evil Results of Credit Inelasticity

To this defect of credit elasticity coupled with that of decentralization were to be attributed largely the frequent and wide fluctuations in the interest rates on call and short-time loans, for which American money markets were notorious, the alternation of periods of excessive speculation stimulated by redundancy of currency and credit with periods of stringency and liquidation brought on by scarcity. For this rigidity of our credit system the business men and the farmers paid the price of higher interest rates; the farmer suffered through the necessity of selling his staple crops largely in the fall when a tight money market was depressing prices, and of buying his supplies largely in the early spring when easy money conditions tended to make prices abnormally high; the banker was compelled to keep large reserves and to tie up an excessive amount of his commercial deposits in capital investments, such as the purchase of bonds and the making of call loans on stock exchange collateral; while upon all classes in the community an uncertain and unstable money market, which was wont to collapse frequently in panics, imposed the burden of great financial anxiety.

CHAPTER IV

DEFECTIVE EXCHANGE AND TRANSFER SYSTEM

A third group of defects in our old banking system consisted in certain cumbersome features—unnecessary wheels and bolts as it were—in our domestic and foreign exchange mechanism. These features greatly interfered with the efficient operation of the machine and at the same time added to the expense. This subject is a large and complicated one and can only be touched upon here. It may be divided into two parts, that relating to domestic exchange, and that relating to foreign exchange.

Domestic Exchange

Of the hundreds of billions of dollars in checks drawn every year, a very large proportion are for local payments, and, being settled promptly through local clearing houses or directly between the banks concerned, offer no difficulties. Our American clearing house machinery is a marvel of perfection for the settlement of local checks. In addition to the checks drawn for purely local

payments, however, checks whose span of life is but one day and which are born, live and die within the narrow limits of one town or city, there are millions of checks drawn daily for out-of-town payments, checks whose span of life often covers many days and which in the range and speed of their movements excel the proverbial American tourist party in Europe. The supply of these checks that is continually in transit, recently estimated to amount at any one time to about \$300 millions, is what is known among bankers as the "float." The problem of efficiently and cheaply handling this float and of equitably apportioning the expense was for years a perplexing one. Some clearing houses, as for example that of New York, imposed certain definite charges for the collection of checks on points beyond a certain radius from New York City. Other clearing houses imposed no charges. The Boston clearing house developed a system for the parring of checks throughout New England, thereby eliminating all collection charges on items drawn on banks entering the system. Similar devices were adopted in a number of other sections of the country, notably in the middle west. Some cities, like Albany for example, became known as free cities and others were notorious for their high collection charges. Many banks

imposed exchange charges—some high and some low—for the collection of out-of-town checks received over their counters, and some made a charge for the collection of checks drawn upon themselves when presented from out-of-town sources. These practices led among other evils to the practice of routing checks, which means that checks in the process of collection would often be sent by roundabout and devious routes in order to avoid or reduce collection charges. In this way the length of time in which checks were in transit was increased and the economic cost to the community for the collection of checks was made heavier.

One serious phase of the practice of routing checks was the manner in which it padded legal reserves. Competition among large-city banks for the accounts of country banks led the city banks to give an immediate credit to the country banks for out-of-town checks, checks which sometimes took the city bank a week or more to collect. The country bank counted as legal reserve out-of-town checks sent to the reserve city bank for collection as soon as they were mailed. The reserve city bank in turn would send some of these same checks to the central reserve city bank and count them as reserve money as soon as they were put in the mail. In this way one check *in*

transit frequently counted as legal reserve for both a country bank and a reserve city bank. Occasionally such a check, after performing a yeoman service in being counted as legal reserve money by two banks for several days, would be returned as worthless marked "no funds."

Another defect of the domestic exchange system was the expense and trouble, for which it was largely responsible, of requiring heavy shipments of currency back and forth over the country. As previously noted, American money markets are subject to pronounced seasonal swings. At one season of the year the relative demand for bank funds is heaviest in the cotton belt of the south; at another time it is heaviest in the great cereal producing sections of the west and middle west; and at another season it is heaviest in the leading financial centers of the east. This heaviest demand often shifts from one section to another within a very brief period of time. Under our old banking system these shifts carried with them large shipments of currency—shipments amounting in the course of a year to hundreds of millions of dollars—and frequently a shipment would hardly be received and unpacked before a shift in the monetary demand would require it to be sent to another section or perhaps to be returned to the place whence it

came. All this involved expense, including packing, shipping, abrasion, insurance and interest items.

A second phase of the exchange difficulties under the old banking system was that relating to the foreign exchanges.

Foreign Exchange Difficulties

Our foreign trade was financed largely through London, and those parts of the trade which were with the Orient and with South America were financed almost entirely through London. London is the world's financial center and it is but natural that we should utilize to a substantial extent her unrivalled facilities for financing oversea trade. The trouble was not that we utilized them, but that we utilized them too much and were unduly dependent upon them. This involved several difficulties, only two of which need be mentioned here. In the first place, payments through London gave rise to an additional foreign exchange operation, which normally added to both the expense and the risk of financing a shipment of goods. In the second place, the fact that invoices, bills of lading and other documents passed through the hands of foreign banks and of South American or oriental branches of foreign banks gave to our foreign competitors "in-

side" information concerning our foreign business—information that was often used to their advantage in competition with our own citizens.

We now come to the fourth and last of the defects in our old banking system, which were outlined at the beginning of this book. That is a defect which is concerned with the relations of our banking system to the federal treasury.

CHAPTER V

DEFECTIVE BANKING MACHINERY FOR FEDERAL GOVERNMENT

The general funds of the treasury were kept in part in the country's nine sub-treasuries, and in part in national banks, which qualified as depositories of government funds. There were 1,584 such national bank depositories at the close of the fiscal year 1914. The apportionment of the funds between the sub-treasuries and the banks on the one hand, and among the depository banks on the other hand, was entrusted to the Secretary of the Treasury. The treasury funds to be thus apportioned varied widely from year to year and from season to season.

In a number of respects this system worked badly. Briefly summarized, the defects were as follows: (1) It led to the continual hoarding in treasury vaults of large sums of money involving substantial administrative expenses and a heavy loss of interest. (2) At certain seasons of the year the Government's receipts greatly exceed its disbursements, as for example

at the times when tax payments are heaviest; while at other seasons, as for example when pension money or interest on the public debt is being paid, the disbursements exceed the receipts. In the former case the money market was disturbed by the Government's suddenly withdrawing large sums from circulation and thereby contracting the currency. In the latter case it was disturbed by the sudden pumping into circulation of large sums of money. These operations, when on any substantial scale, tended to affect the interest rates on call loans and the prices of speculative securities. The task imposed upon the Secretary of the Treasury, therefore, of apportioning these large government balances among the banks and the sub-treasuries was a difficult one and one which placed too great power and responsibility over the money market in the hands of a government official. It also led to criticism and jealousy among depository banks. (3) The system caused depository banks to rely unduly upon the Secretary of the Treasury for aid in the form of increased government deposits in times of financial pressure, instead of depending upon themselves and keeping "their houses in order" so as to be ready for emergencies. "The grandfatherly attitude of the Secretary of the Treasury toward the banks"

in the matter of government deposits was an expression frequently heard.

The four chief defects of our American banking system as it existed prior to the enactment of the federal reserve law have now been briefly described. They were decentralization, inelasticity of credit, cumbersome transfer system, and defective government depository system. To remedy these defects the federal reserve system was created by the law of December 23, 1913; and federal reserve banks opened their doors for business November 16, 1914. Since that date the system has developed rapidly under the management of administrative boards and under the influence of a number of important amendments to the organic law. It is not our task here to trace this interesting development, but rather to answer briefly the question: How is the federal reserve system as now developed remedying the defects of the old banking system? Let us consider the remedy in its relation to the four general defects in the order in which they have been discussed.

CHAPTER VI

HOW THE FEDERAL RESERVE SYSTEM IS REMEDY- ING THE OLD EVIL OF THE DECENTRAL- IZATION OF AMERICAN BANKING

The federal reserve act does not destroy our American system of small independent banks with its prestige of over a half century of growth and usefulness, and with its great merit of local adaptability to the needs of a country of magnificent distances and of widely varying economic activities. The federal reserve law continues these thousands of independent banks with all their essential functions, but federates them into a unified system which is democratic in its organization and nationwide in its field of operation—a system dedicated to public service.

Federal Reserve Districts

There are twelve federal reserve banks, each of which operates in one of the federal reserve districts into which the country is divided. In determining the boundaries of these districts the authorities were required to have “regard to the

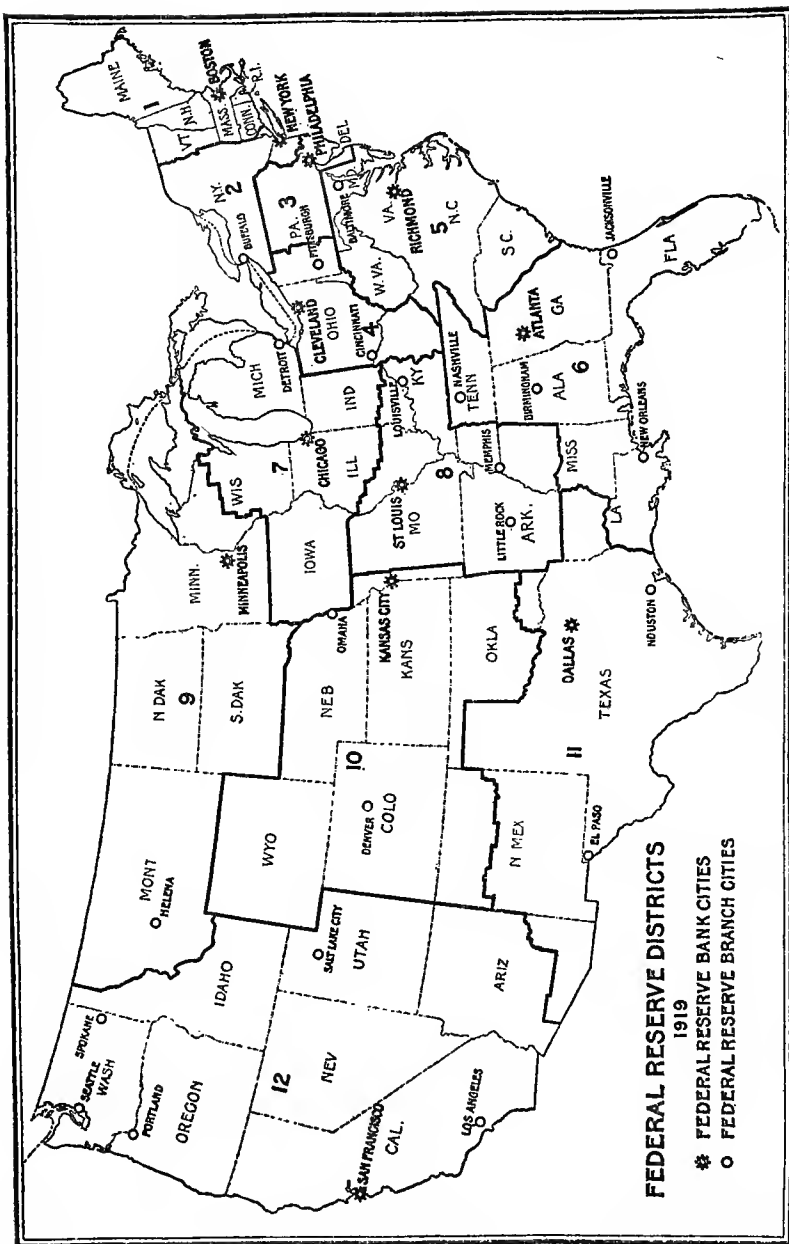
convenience and customary course of business," to make each district large enough to provide the minimum capital of \$4,000,000 required by law, and to make none so large as to dominate the others thereby endangering the federal principle which the law sought to establish. A map showing the boundaries of the twelve federal reserve districts and the location in each district of the federal reserve city, namely, the city in which the main office of the federal reserve bank is located, is given below.¹

The fact that the number of banks and the amount of banking capital in different sections of the country vary so widely explains the great differences in the geographic sizes of the federal reserve districts.

Plan of Organization

All national banks are required to be members of the system, and state banks and trust companies (which conform to certain standards as to size and character of business) are encouraged to join. Comparatively few state institutions joined during the first two years of the system, but the liberal policies of the federal reserve

¹The map is a reproduction of the one published in the Federal Reserve Bulletin of September, 1919.



authorities, together with later amendments to the law and a growing feeling that it is the patriotic duty of state institutions to join the system in these times of national emergency, these factors have all made the state institutions more favorably disposed toward the system and they have lately been joining in ever increasing numbers.

Member banks are required to subscribe to the capital stock of the federal reserve bank in their district to an amount equal to six per cent of the member bank's capital and surplus. Only one-half of this subscription has so far been called, giving the federal reserve banks a paid-in capital of \$85,140,000 on September 12, 1919, but the other half may be called at any time by the federal reserve authorities.²

There are two noteworthy features of a federal reserve bank's plan of organization. They are first, its democracy, and second, its recognition of the quasi-public nature of the banking business through its grant to the public of participation in the bank's management.

The administrative control of a federal reserve bank is democratic. "One bank, one vote" is the rule. Furthermore, in order to prevent the large

² Provisions for the establishment of federal reserve branch banks are contained in the federal reserve act (section 3). Up to September, 1919, twenty-one branch banks had been established.

banks from dominating the small ones by reason of their greater prestige and to assure the small banks of representation on the board of directors, there is a device by which all the member banks are divided according to their capital into three groups, which, reminiscent of the three bears in the Goldylock story, may be called big banks, little banks, and middle-sized banks. All the member banks in a federal reserve district are classified into these three groups. Each of the groups was originally required to contain approximately the same number of banks, but by the amendment of September 26, 1918 this requirement was discontinued. At present the federal reserve board has authority to determine the number of banks which shall constitute each group, being merely subject to the requirement that "each group shall consist as nearly as may be of banks of similar capitalization." The largest bank in the group of little banks is therefore normally smaller than the smallest one in the group of middle-sized banks, and the largest one in the group of middle-sized banks is normally smaller than the smallest one in the group of big banks. On the basis of the one bank one vote principle, each group elects two directors, one of whom, called a Class A director, is a banker and represents the stock-holding banks, while the other, called a Class B director, is a business man or farmer and

represents the business community. To these six directors so elected there are added three others known as Class C directors, who are appointed by the central federal reserve authorities at Washington to represent the interests of the federal government and of the general public. One of these Class C directors, who is required to be a person of "tested banking experience," is designated by the central authorities as Chairman of the Board, and is known as federal reserve agent. The board thus consists of nine directors, who hold office for three years (the term of office of one director of each class terminating each year), and who are broadly representative of different interests among the American public.

Crowning the arch of which the twelve federal reserve banks constitute the structural stones and forming its keystone, is the central board at Washington, known as the federal reserve board. This board consists of seven members, including the Secretary of the Treasury and the Comptroller of the Currency, who are ex-officio members, and five members appointed by the President of the United States with the advice and consent of the Senate, who hold office for a period of ten years. At least two of these five members the law says must be "experienced in banking or finance." The Secretary of the Treasury is ex-officio chairman of the federal reserve board. The

board is assisted by a federal advisory council, consisting of twelve members appointed respectively by the boards of directors of the twelve federal reserve banks. The advisory council meets with the federal reserve board at least four times each year and oftener if called by the board.

The appointment by the federal reserve board of three of the nine directors (including the chairman) of each of the federal reserve banks and the appointment by each federal reserve bank of a member of the federal advisory council federate together the twelve federal reserve banks under the federal reserve board and give a common knowledge and a unity of purpose. Conferences from time to time of the governors of the twelve federal reserve banks and of the federal reserve agents of the banks, and occasional conferences of the governors and the federal reserve agents with the federal reserve board have added much to the smooth and unified working of the system. In matters of general policy the federal reserve board is given large powers and is the directing head of the system.⁸

Here then is the centralizing machinery which is bringing order into our banking system, and

⁸ The board's control is strengthened by its statutory powers: (1) "To examine at its discretion the accounts, books and affairs of each federal reserve bank and of each member bank and to require such statements and reports as it may deem necessary. . ."

is making possible the development of broad financial policies which can be carried out with promptness and continuity.

In considering the manner in which the old evil of decentralization is being remedied by the federal reserve system, we may now pass from the administrative machinery of centralization to the methods by which the old evils of scattered and immobile reserves are being eliminated.

District Centralization of Bank Reserves

The federal reserve act as originally passed provided for the gradual withdrawal of legal reserve money from deposit in the banks of reserve and central reserve cities. All such deposited legal reserves were to be withdrawn by the end of a three-year period beginning with the date of the inauguration of the federal reserve system. Accordingly, after November 16, 1917, all legal reserve money of member banks, the law required to be held "in the vaults of the member banks or in the federal reserve bank, or in both, at the option of the member bank" (section 19 of Act). In conformity with this requirement

(2) "To suspend or remove any officer or director of any federal reserve bank. . ." (3) "To suspend, for the violation of any of the provisions of this act, the operations of any federal reserve bank, to take possession thereof, administer the same during the period of suspension, and, when deemed advisable, to liquidate or reorganize such bank." (4) "To exercise general supervision over said federal reserve banks." Federal Reserve Act, Section 11.

the percentage of the legal reserves of member banks kept on deposit in the banks of reserve and central reserve cities declined very much by the summer of 1917. On June 21, 1917, an amendment was passed to the federal reserve act requiring every bank, banking association or trust company belonging to the federal reserve system to maintain its entire legal reserve in the form of a deposit at the federal reserve bank of its district. Thus by about five months the time was anticipated when legal reserve money of member banks should cease to be kept on deposit in banks other than federal reserve banks. The time therefore arrived in the summer of 1917 when commercial banks belonging to the federal reserve system ceased tying up their legal reserve money by depositing it in the banks of our money market centers there to be loaned out at call to speculators on the stock and produce exchanges. This divorcing of the legal reserves of nearly 8,000 commercial banks from the speculative and capital loans of the stock market—mainly that of Wall Street—is one of the big achievements of the federal reserve system. The federal reserve law, as amended, recognizes only one form of legal reserve, and that is a member bank's deposit in its federal reserve bank. Member banks may keep as much or as little cash on hand for till money as they wish to. They may keep bal-

ances in other banks if it suits their convenience to do so—all that is their own affair for which their responsibility is to their stock holders and their customers—but their legal reserve, the reserve which the Government looks upon as the minimum below which the public interest demands that banks should not go, that reserve must all be kept on deposit in federal reserve banks, the nation's reservoirs of reserve money.

For reasons that will soon be made clear the concentration of the country's reserve money in a few large reservoirs makes possible a much more efficient use of each dollar of reserve money than under the old system of scattered reserves, and, as a result, the legal reserve requirements have been greatly reduced. The percentage reserves at present required against demand deposits and time deposits are as follows:⁴

Banks	Demand Deposits, i.e., Deposits Pay- able Within	Time Deposits, i.e., Deposits Pay- able After 30
	30 Days	Days Notice
Central reserve city banks,	13	3
Reserve city banks,	10	3
Country banks,	7	3

⁴ Banks located in the outlying districts of a central reserve city or a reserve city, or banks located in territory added to such a city by the extension of its corporate charter, may, upon the affirmative vote of five members of the federal reserve board, reduce their legal reserves to the percentages required of country banks. In the case of banks located in central reserve cities the reduction may be authorized to the percentage required of country banks or merely to that required of reserve city banks.

On November 1, 1918, the twelve federal reserve banks held deposited reserves of other banks to the amount of \$1,442 millions. Reserve money collected in a few large reservoirs is quickly available in large quantities either for export or for domestic use, and the fact that it is readily available in large quantities inspires public confidence and lessens the danger of financial panic. When the public knows that gold in abundance is available on demand it does not want it, except to meet the normal demands of international trade. The federal reserve banks, of course, do not keep on hand all the reserve money deposited by member banks. Like other banks, they invest it. The law, however, requires them to keep a reserve of thirty-five per cent against deposits,⁵ and it is their established policy to maintain reserves much larger than this normal legal minimum.

Mobilization of Reserves

A corollary to the district centralization of reserves is their mobilization. Reserve money must not only be piped into a few large reservoirs, but these large reservoirs must be piped together, and there must be a pumping engine of sufficient power to force the reserves promptly and in large quantities to any place desired. The federal re-

⁵ See pages 58-60.

serve system creates just this machinery. It provides numerous devices by which reserve money can be quickly moved from places of redundancy to places of scarcity. A few of the more important of these devices will be briefly described here, while others will be discussed later in connection with the general topics of currency and credit elasticity and the transfer system. Let us consider first the inter-district mobility of reserve money, namely the movability of reserves from one federal reserve district to another; and second, the intra-district mobility of reserves, or the movability of reserves within the boundaries of one district.

Inter-District Mobility

Broadly speaking there are three ways in which the federal reserve law has increased the inter-district mobility of reserve money. They are: (1) Rediscounting by one federal reserve bank for another. (2) Open market operations of federal reserve banks. (3) Creation of a broader discount market for commercial paper.

Rediscounting by one Federal Reserve Bank for Another

Under the old banking system, as we have seen, in time of emergency, each bank held tight its own reserves, or, to change the figure, "sat firmly on the lid." In the controversy for banking re-

form, which culminated in the federal reserve act, the advocates of a single central bank contended that a system of eight to twelve banks like that proposed in the federal reserve bill would perpetuate the old evil by leading to the same sort of scramble for reserves, in time of emergency, among the different federal reserve banks, that had formerly existed among the individual banks of the country. Specifically to meet this danger a provision was inserted in the act (Section II) empowering the federal reserve board "to permit, or, on the affirmative vote of at least five members of the reserve board to require federal reserve banks to rediscount the discounted paper of other federal reserve banks at rates of interest to be fixed by the federal reserve board." This means that in case there is an exceptionally heavy demand for reserve money in any section of the country—a demand heavier than the banks of that section can reasonably meet—the reserve banks in other sections where money is more plentiful will come to the rescue, either voluntarily or under compulsion of the federal reserve board, and will rediscount the paper of the reserve bank in the section under financial stress. This process, of course, will cause a flow of cash from the reserves of the former banks to the reserve of the latter, thereby easing the money market in the threatened section.

After the United States entered the war there developed a strong tendency for a compensatory movement of reserves among the federal reserve banks. Reserves of some of the banks frequently fall rapidly while those of others are rapidly rising, often with little or no change in the reserve position of the twelve federal reserve banks as a whole. This compensatory movement is due largely to operations of the government which often result in heavy withdrawals of funds from banks in one section of the country for the making of payments in another. This situation has made it desirable from time to time that one federal reserve bank should make advances to another. At times the federal reserve board has taken the initiative in this matter, but apparently the banks, in most cases, have willingly complied with the board's request. The twelve federal reserve banks have so far worked very harmoniously, thanks largely to the frequent conferences of the governors and the federal reserve agents both among themselves and with the federal reserve board, so that it seems improbable that compulsion by the board will often be necessary to require the more favorably situated banks to come to the rescue of those less favorably situated, in time of danger. The reserves of the twelve reserve banks are so closely piped together, particularly since the formation of the gold settle-

ment fund (to be described later, pages 75-78), that they may reasonably be considered to be closely connected tanks of a single large reservoir.

Open-Market Operations

While the federal reserve banks are essentially bankers' banks, since their stock is owned exclusively by member banks and since their only regular domestic customers are banks and the federal government, it is none the less true that Congress found it necessary to confer upon these banks certain limited rights of dealing with the outside public. The possession of such rights by the federal reserve banks appeared necessary, first, as part of the machinery for conserving the American money market and making their discount rates effective⁶ and second, as a method of profitably employing their funds in times of easy money, when member banks are making few calls

⁶ If, for example, a federal reserve bank raises its discount rate in order to prevent dangerous loan expansion on the part of member banks or to prevent an undue outflow of gold from the country, it may happen that the member banks may not be convinced of the need of such precautionary measures, and, not being in need of securing funds from the federal reserve bank by way of rediscount, may ignore the efforts of the federal reserve bank to conserve the money market. The banks may accordingly continue the policy of loan expansion at low discount rates. Under such circumstances the federal reserve rate would be said to be "ineffective." To meet this situation and force the banks "into line" the federal reserve bank may go into the open market and sell bank acceptances, commercial bills, municipal warrants and government bonds, and, by withdrawing from the market the

upon them for rediscount.⁷ The dealings with the outside public so authorized are known as "open-market operations," and are provided for in section 14 of the Act. Into the details of this important section we need not go. For our purposes it is sufficient to note that federal reserve banks may buy and sell in the open market either at home or abroad commercial bills of exchange, bankers' acceptances, and certain specified kinds of government obligations. Under this authority a federal reserve bank in one section of the country may buy and sell eligible commercial paper and government securities in any other section of the country. Such dealings, of course, tend to cause a flow of reserve money from the district of the buyer to that of the seller. If the San Francisco federal reserve bank, for example, buys \$1,000,000 worth of trade acceptances, bank acceptances and municipal warrants in the open market in New York, its settlement check to whomever paid is likely to be deposited in a New York bank, and for that bank to be collected by

funds received in payment therefor, may tighten the market, and force up the discount rate thereby bringing the market rate into harmony with the federal reserve rate.

⁷ In the early days of the federal reserve system when the member banks were making very little call upon the federal reserve banks for rediscounts or other advances, the federal reserve banks invested substantial sums in municipal warrants and bank acceptances in the open market, and by that means covered a large part of their running expenses.

the New York federal reserve bank from the San Francisco federal reserve bank. Unless offset by payments in the other direction, the payment by San Francisco will necessitate a transfer of reserve money, presumably through the "gold settlement fund,"⁸ from San Francisco to New York. If the New York bank, in which the million dollar check was originally deposited, leaves the proceeds on deposit with the New York federal reserve bank, federal reserve "reserve money" will be transferred from the bank in San Francisco to the bank in New York. In this manner open market operations transfer reserve money from places of redundancy to places of scarcity, and tend to maintain a national equilibrium in our money rates.

Creation of a Broader Discount Market for Commercial Paper

The third method by which the federal reserve system is rendering more mobile our reserve money is through the creation of a broader discount market for commercial paper. As we have already seen, under the old banking system the great bulk of American commercial paper was essentially local paper with little or no market outside of the community in which it was created. The federal reserve system has provided the

⁸ The gold settlement fund is described on pages 75-78.

machinery by which high grade commercial paper can be rediscounted throughout the United States, and, in this connection, has sought to encourage by preferential discount rates and otherwise the use of trade acceptances and bank acceptances—credit devices widely used in Europe.

When the seller of merchandise draws a trade bill upon the buyer at, say, 60 days sight for the amount of the bill, and the buyer writes across its face "accepted" and signs his name with the date of acceptance, a credit instrument is created which has very pronounced advantages over the open-book account, from the standpoint of the seller, the buyer and the bank. The seller has a definite acceptance of the goods which the buyer cannot question in the future without very good reason; he has a promise from the buyer to pay at a definite date; and he has the buyer's obligation expressed in the form of a negotiable instrument which is highly liquid, and which enjoys preferential rediscount rates at all federal reserve banks and therefore presumably at the seller's local bank and in the open market. The buyer of the merchandise who accepts the bill places his credit standing at a higher level than it would be if he bought on open book account. His improved credit should enable him to buy on better terms. Having his accounts thus given definite maturities he is less likely to be tempted to overbuy than

he would be under the loose open-book account method. The buyer is also a seller, and if he uses trade acceptances in connection with his purchases he is in a stronger position to demand them in connection with his sales. From the banker's point of view the trade acceptance is an ideal form of commercial paper. It bears two names, usually carries with it evidence that it represents a self-liquidating commercial transaction and not an accommodation loan, it is almost certain to be paid at maturity and not to seek renewal, is not subject to the provision of the national banking law which prohibits a national bank from loaning to one customer an amount in excess of ten per cent of the bank's capital and surplus (Revised statutes, section 5200), and it is very easy to turn into cash before maturity either by sale in the open market or by rediscount at a federal reserve bank because of the preferential discount rates given such paper. The trade acceptance is therefore incomparably more liquid than the open-book account, and, other things equal, is more liquid than one-name paper.

Even more liquid than the trade acceptance, because the acceptor is ordinarily of more widely recognized financial standing, is the domestic bank acceptance authorized by the federal reserve law.⁹ The bank acceptance is similar to the

⁹ The statutory provisions concerning bank acceptances will be found in section 13, paragraph 5 of the federal reserve act.

trade acceptance. It differs, however, in the fact that the seller of the merchandise draws his bill not upon the buyer but upon the buyer's bank, which accepts the bill for the buyer whose financial standing is known to the bank and who has arranged with the bank in advance to lend him its credit in this way. The seller of the merchandise having received an acceptance of the bill from the buyer's bank may discount the bill at his own bank or sell it in the open market if he does not wish to hold it until maturity. The type of domestic bank acceptance made eligible for rediscount at federal reserve banks covers bills having not more than 90 days, exclusive of days of grace, to run which grow out of transactions involving the domestic shipment of goods, provided that documents conveying or securing title are attached at the time of acceptance; and it covers bills not exceeding the above-mentioned maturity which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples.

Inasmuch as bank acceptances and high grade trade acceptances, enjoying as they do preferential rates of discount at the federal reserve banks, have a wide market, their increasing use is causing more and more paper to flow away from the banks in sections of the country where the dis-

count rate is relatively high to be discounted in the banks of those sections where the rate is relatively low. Such a flow of commercial paper from the dear markets to the cheap ones, obviously causes a counter-flow of bank reserves from the cheap markets to the dear ones and thereby tends to reestablish an equilibrium in discount rates. Of course, this flow is not an absolutely free one and perfect equilibrium is never obtained. The point is, however, that the widening marketability of our commercial paper under the federal reserve system is making this flow of reserve money much less sluggish than it was formerly.

Intra-District Mobility of Reserves

The forces, which act for the increasing mobility of reserve money within the boundaries of a federal reserve district, are essentially the same as those just explained for that between districts. Obviously paper of wide acceptability flows from place to place within a district more freely than paper whose merits are less widely recognized; and, within a district as between districts, the widely marketable paper flows from the places where discount rates are high and bank funds are scarce to the places where the rates are low and funds are more plentiful. Furthermore, the bank reserves of the district which have been

pipied to the one reservoir, namely, the federal reserve bank, can be readily pumped to the banks of any section where funds are in heavy demand. If banks throughout the district were rediscounting in moderate sums with the federal reserve bank, and if a sudden emergency should cause an exceptionally heavy demand for funds in any section, the federal reserve bank could raise its rate of discount, thereby reducing the rediscount demands of the banks less urgently in need of funds, and could then turn larger amounts into the section where the demand was heaviest. Additional funds could be secured by the federal reserve bank within the district (as well as outside) by the sale in the open market of securities held in its "secondary reserve."

In the illustrations so far given we have assumed a fixed amount of banking funds, and have shown how these funds can be readily mobilized under the federal reserve system and concentrated at the points where they are most needed. The problem of meeting unusual calls for banking funds is, however, an easier one under the federal reserve system than the above discussion implies. The reason is that under the new system there exist in addition certain elastic elements in our supply of bank funds. These will be considered in the next chapter.

CHAPTER VII

CREDIT ELASTICITY UNDER THE FEDERAL RESERVE SYSTEM

Both bank-note currency and deposit or check currency are more elastic under the new system than under the old.

Bond-Secured Bank Notes

In order to prevent the alleged danger of an undue contraction of the currency and to protect from loss the banks owning the two per cent bonds, which were largely pledged with the Government as security for national bank-note circulation and which by reason of the circulation privilege had a value far above their investment value, the Government decided not to withdraw from circulation at once the old bond-secured bank notes. The federal reserve law accordingly continued the circulation of these notes, but contained provisions looking toward their gradual retirement. From the time of the enactment of the federal reserve act (December 23, 1913) to September 1, 1919, the national bank notes in circu-

lation were only reduced, however, from \$726 millions representing about 21 per cent of our total monetary circulation to \$661 millions, representing about 12 per cent. To this sum there should be added, to be accurate, \$189 millions of so-called federal reserve bank notes which are merely bank notes of the old type that are issued by the federal reserve banks instead of by the national banks. They are secured by a specific deposit, with the United States treasurer, of bonds or of certain short-time obligations of the United States. Up to the early fall of 1918 these federal reserve bank notes were of comparatively little consequence, but with the gradual substitution of them, for silver certificates and silver dollars in circulation, since that time, under the provisions of the act of April 23, 1918, they have been assuming increasing importance.

Federal Reserve Notes

The notes upon which the federal reserve system places its sole reliance for bank-note elasticity are the so-called federal reserve notes. These notes, which are obligations of the United States Government and are "first and paramount lien on all the assets" of the issuing federal reserve banks, have back of them specifically pledged with the federal reserve agent to the

amount of 100 per cent certain forms of high grade collateral. This collateral may consist of: (1) Paper endorsed by member banks and drawn for strictly commercial, industrial or agricultural purposes, or for the purpose of carrying or trading in securities of the United States Government, in other words, paper of the type hereafter described¹ which is eligible for rediscount at a federal reserve bank. (2) Bills of exchange endorsed by a member bank and bankers' acceptances bought by the federal reserve bank in the open market. (3) Gold and gold certificates.

Except under special circumstances, to be considered later,² a gold reserve of not less than 40 per cent must be kept by each federal reserve bank against its outstanding federal reserve notes. Gold specifically pledged with the federal reserve agent as collateral for the notes may be counted in making up this 40 per cent reserve, as may also gold kept in the redemption fund with the treasurer of the United States at Washington for the redemption of the notes.

Elasticity of Federal Reserve Notes

As regards the matter of elasticity, these notes have in a high degree the quality of expansibil-

¹ Pages 61-63.

² Pages 53-54.

ity, namely, of having their circulation easily increased in times of need. If member banks in a given section of the country need an increased supply of currency to meet local demands, they may rediscount eligible paper with their federal reserve bank and take the proceeds of the rediscounts in federal reserve notes, which pass readily as hand-to-hand money and are satisfactory till money for the banks. The federal reserve bank, if its supply of notes is inadequate, secures, on application to the federal reserve agent, additional notes by depositing with the agent the rediscounted paper or other eligible paper in its portfolio. This process may continue as long as the federal reserve bank has paper available for deposit with the federal reserve agent and its gold reserve does not fall below the normal legal minimum of 40 per cent. In case of great emergency, however, the federal reserve board may permit a reduction of the note reserve below 40 per cent, provided it imposes a graduated tax upon the amount of the deficiency—a tax which must be added to the rates of interest and discount fixed by the federal reserve board. Furthermore, to meet extreme emergencies the board is authorized “to suspend for a period not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen

days any reserve requirement" specified by the Act. It is thus seen that the federal reserve notes have ample power of expansion in time of emergency and that there no longer exists a stone-wall limit beyond which expansion cannot go and go promptly. There is no fixed limit, but beyond a certain point further expansion can be secured only at a rapidly increasing expense to those wishing the notes.

The notes issued to the twelve federal reserve banks amounted to \$2,830 millions on September 12, 1919. Back of these notes there was held by the twelve federal reserve agents the following collateral:

	Millions
(1) Gold coin and certificates.....	\$243
(2) Gold in redemption fund at Washington	93
(3) Gold with federal reserve board	854
(4) Eligible paper, (representing \$386 millions above the minimum required by law)	2,026
Total.....	\$3,216

These figures show that 42 per cent of the federal reserve notes issued were backed dollar for dollar by gold collateral. The total gold resources of the twelve federal reserve banks on

the above date were \$2,069 millions, which on the basis of the 40 per cent reserve required by law would represent a gold reserve sufficient for a circulation of \$3,792 millions federal reserve notes, after setting aside the legal minimum lawful money reserve of 35 per cent against deposits. This would increase by about 34 per cent the amount issued to the federal reserve banks, as of September 12, 1919. Obviously there still resides in the federal reserve system considerable power of note expansion—a power which, in the present conditions of currency and credit inflation, should be used with great caution.

For the purpose of contracting the circulation of federal reserve notes when the business demands for currency decline, the machinery is as follows. When the demand for notes in the pockets of the people and the tills of merchants falls off, as it does, say, after the harvesting season in the autumn, the surplus notes are deposited by the public in the banks. Inasmuch as national banks cannot count these notes in their vaults as legal reserve money, they will tend to send to their federal reserve banks for deposit any notes they receive in excess of the amount needed for till money. Notes which were issued by the federal reserve bank of the district may thus be withdrawn from circulation. Notes so received which

were issued by other federal reserve banks are sent back to the issuing banks. On this subject the law says: "Whenever federal reserve notes issued through one federal reserve bank shall be received by another federal reserve bank, they shall be promptly returned for credit or redemption to the federal reserve bank through which they were originally issued or, upon direction of such federal reserve bank, they shall be forwarded direct to the Treasurer of the United States, to be retired. No federal reserve bank shall pay out notes issued through another under penalty of a tax of ten per centum upon the face value of notes so paid out" (Section 16). This requirement that federal reserve banks shall send back promptly the notes of other federal reserve banks will obviously increase in its effectiveness as a means of currency contraction with the increase in the number of branches of federal reserve banks established throughout the country.

Another device calculated to encourage the retirement from circulation of bank notes whenever they become redundant is the provision of the law authorizing the federal reserve board to charge such a rate of interest as it may deem desirable on federal reserve notes uncovered by gold or gold certificates issued to federal reserve banks.

The fact that federal reserve notes are not legal tender is believed by some to exercise an influence in the direction of causing their retirement when they become redundant. In view of the fact, however, that the question of legal tender is rarely raised in connection with money which is not depreciated, it is doubtful if the lack of legal tender adds anything to the "homing quality" of the notes.

Elasticity of Deposit Currency

Elasticity of deposit currency, although it has not received the attention in our economic literature received by elasticity of bank-note currency, is of greater importance because the amount of business done by means of deposit currency is many times larger than that done by means of bank notes.³ Prior to the establishment of the federal reserve system, as we have seen,⁴ our deposit currency, although not as inelastic as

³ The estimates of Professor Irving Fisher give for the year 1913, the last antebellum year, the average rate of monetary turnover for the country as 21, and the total amount of business effected by deposit currency as \$440 billion. The bank-note circulation for July 1 of that year was \$759 million, which multiplied by the average rate of monetary turnover would give the total business transacted by means of bank notes as \$16 billion, or a sum equal to only 1/27 of that transacted by means of deposit currency.

⁴ See pages 17-18.

our bank-note currency, was none the less deficient in the quality of elasticity. How has the federal reserve system remedied this defect?

We have just seen how by increasing the mobility of bank reserves, the federal reserve system has enabled bank funds in the form of deposit credits to flow quickly to any section of the country where bank funds are much needed. This mobility of funds is often spoken of as deposit-credit elasticity. In the present discussion, however, we are using the word elasticity in its stricter sense of "expansibility and contractility," and do not include in the term mere mobility of funds, namely, their capacity to move quickly and with little friction from one place to another.

The federal reserve system increases the elasticity of our deposit currency in a number of ways. In the first place, it has removed the rigid legal reserve requirements of our former national banking system and has put in their place much less rigid ones. The only legal reserves now required of national banks are the deposited reserves in the federal reserve bank. For till money banks are permitted to hold in their own vaults as much or as little money as they individually need, and the kinds of money they desire.

Federal reserve banks in turn are required to keep against deposits a legal reserve of lawful

money equivalent to 35 per cent. Unlike member banks, however, the federal reserve banks are not strongly pressed by competition and by the desire for profits to take up all the slack and reduce their reserves in ordinary times to this normal legal minimum. There has been no evidence that federal reserve banks will keep their credit extended to the legal limit, as individual banks have so widely done in the past. Despite the urgent need of funds brought about by war conditions, our federal reserve banks have adopted the policy of maintaining reserves well above the legal minimum. They have little profiteering motive to reduce their reserves to a dangerously low figure, because all the profits of federal reserve banks above a six per cent cumulative dividend to the stock owned by member banks go to the Government.⁵ Fortunately there has ap-

⁵The law (as amended March 3, 1919) provides that after the 6 per cent cumulative dividend claims have been met, the net earnings of each bank shall be paid to the United States as a franchise tax; except that the whole of such net earnings shall be paid into a surplus fund until the surplus shall amount to 100 per cent of the subscribed capital stock. After this 100 per cent surplus is accumulated, 10 per cent of the net earnings, above 6 per cent dividend charges is to be added annually to the surplus. Upon the liquidation of a federal reserve bank or the withdrawal of a member bank none of this surplus goes to the member banks. Ultimately it all goes to the Government.

Although the federal reserve banks are administered with the primary object of public service rather than profit, they have none the less realized good profits on the capital invested. For the year 1917 the net earnings for all 12 banks represented 18.9 per cent of the average paid-in capital, and for the year 1918, 72.6 per cent.

peared no evidence of competition among the federal reserve banks to see which can show the largest profits. Under the leadership of the federal reserve board, the great emphasis has been on competition for public service. The result is that the federal reserve banks have been conserving their strength for times of emergency. Under such circumstances the federal reserve banks should have substantial powers of credit expansion to call upon in times of emergency, before their reserve position is forced down to anything like the 35 per cent legal limit.

This limit itself, however, is not a rigid one. It may be passed in times of extreme emergency, although only by paying a price. The federal reserve law provides, as we have previously noted, that the federal reserve board may "suspend for a period not exceeding thirty days, and from time to time . . . renew such suspension for periods not exceeding fifteen days, any reserve requirement specified in this act: *provided*, that it shall establish a graduated tax upon the amounts by which the reserve requirements" against deposits are permitted to fall below the level of 35 per cent (Section 11). Inasmuch as this tax would presumably be added to the rate of discount charged by the reserve bank, there would be an increasingly heavy charge upon loans made when the reserve was below the normal legal minimum. None the less, such loans could be

made without limit to those who could give the security and would pay the price.

The most important device of the federal reserve system for securing elasticity of deposit currency, as well as of bank-note currency,⁶ is found in the machinery enabling member banks to borrow funds of their federal reserve bank. Funds so borrowed, when left on deposit with the federal reserve bank, serve as legal reserve money for the member banks. The making of such loans to member banks is one of the chief functions of federal reserve banks. Broadly speaking the loans are of two kinds, rediscounts, and loans on collateral. Let us consider briefly each of these types of loans.

Rediscount

Federal reserve banks always stand ready to rediscount in time of need eligible paper for member banks.

⁶ A member bank, say a country bank, whose reserve is in danger of running below the 7 per cent of demand deposits, and 3 per cent of time deposits, required by law, or which is in need of more cash for till money, may take, say \$10,000 of its eligible commercial paper to its federal reserve bank and have it rediscounted for, say, 60 days at $4\frac{1}{2}$ per cent. The proceeds would be \$9,925, which at 7 per cent would represent a legal reserve sufficient for \$141,714 of demand deposits, and would therefore greatly increase the bank's lending power. Any part of the proceeds of the rediscount in excess of that needed to maintain the bank's 7 per cent legal reserve with the federal reserve bank could be checked against and taken in cash, presumably in federal reserve notes, for the bank's till money.

For the purpose of keeping the assets of federal reserve banks liquid, the law and the administrative regulations of the federal reserve authorities place rigid limitations upon the kinds of paper eligible for rediscount. These limitations have reference both to the length of time the paper is to run, and to the purpose for which it is issued. As to time, notes rediscounted must have a maturity at the time of rediscount of not more than 90 days (exclusive of days of grace); except that a limited amount of bills drawn for agricultural purposes or based on live stock may be rediscounted, provided they have a maturity not exceeding six months (exclusive of days of grace). As to the purpose for which the bills are issued, the law limits rediscounts to two classes of paper. They are: (1) Notes, drafts and bills of exchange bearing the endorsement of a member bank and "arising out of actual commercial transactions," that is, issued or drawn "for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used for such purposes"; and (2) Notes, drafts and bills of exchange bearing the endorsement of a member bank and issued or drawn for the purpose of carrying or trading in "bonds and notes of the Government of the United States." Except for United States Government securities, the law specifically prohibits the rediscounting

by federal reserve banks of paper issued or drawn "for the purpose of carrying or trading in stocks, bonds, or other investment securities."

Collateral Loans

The second type of loan is the discount of collateral notes of member banks. These notes must be for periods not exceeding fifteen days, and the only permissible collateral is "such notes, drafts, bills of exchange, or bankers' acceptances as are eligible for rediscount or for purchase by federal reserve banks," and bonds or notes of the United States Government. There was no provision in the original act for collateral loans, but experience soon showed that member banks frequently wished to secure from federal reserve banks advances for brief periods, so brief that they were reluctant to rediscount customers' paper for the purpose. To meet the difficulty an amendment to the federal reserve act was passed September 7, 1916, authorizing these short-time collateral loans. The authority to make such loans has proven to be particularly useful in connection with the financing by the banks of Liberty bond purchases either for themselves or for their customers—purchases which are likely to involve heavy drains upon the banks for very brief periods. During the years 1917, 1918, and 1919

these collateral loans have constituted by far the most important form of advance made by federal reserve banks to member banks. The great bulk of them are secured by United States certificates of indebtedness and Liberty bonds.

Contraction of Circulating Credit

So far we have been speaking of the elasticity of deposit currency under the new banking system in the direction of expansion in times of increasing currency demand. The contraction of deposit currency, as soon as the need for it falls off, is brought about by the pressure of high discount rates, to which the pressure of the graduated tax is added. This double pressure encourages borrowers to pay off their loans. This fact, and the increasing restrictions which federal reserve banks place upon rediscounts as money market conditions become easier, tend to contract the circulation of deposit currency and restore the reserves to a normal condition. In this respect a great public responsibility rests upon the federal reserve authorities to conserve the banking strength of the country in times of easy money, so that it can be called upon in times of emergency. Some critics of the federal reserve system believe that the machinery it provides for contracting both deposit and bank-

note currency, in times of currency redundancy, needs strengthening. Upon this subject it is difficult as yet to pass a safe judgment because times have been so abnormal since the system went into operation.

There is no question but that the federal reserve system has added greatly to the elasticity of both our deposit currency and our bank-note currency.

CHAPTER VIII

DOMESTIC AND FOREIGN EXCHANGE UNDER THE FEDERAL RESERVE SYSTEM

We may now pass to the consideration of how the federal reserve system is meeting the difficulties of the old banking régime as regards domestic and foreign exchange. Domestic exchange will be considered first.

Domestic Exchange

Under the old régime the collection and clearing of out-of-town checks for country banks was handled largely by the banks in reserve and central reserve cities, which were the depositories of the legal reserves of the country banks. The service of collecting these out-of-town checks was rendered to the country bank as a partial compensation for the use of its reserve deposits at a low rate of interest, and as a lure to secure other business from the country bank, competition having been keen among large banks in money market centers for the accounts of out-of-town banks. When Congress decided, therefore, that the sys-

tem of pyramiding the legal reserves of national banks by permitting them to be deposited to a large extent in other national banks was a bad one and should be done away with, it was naturally forced to provide a machinery to take the place of the reserve and central reserve city correspondent banks for the work of collecting out-of-town checks. If the country bank was no longer to be permitted to count a deposit with its city correspondent as legal reserve money, but was to be compelled to maintain its entire legal reserve on deposit with its federal reserve bank, it would naturally withdraw or at least greatly reduce its deposit balance with its correspondent banks. But under such circumstances who would collect its out-of-town checks and otherwise serve it in connection with out-of-town business? The city bank, no longer holding the country bank's reserve deposits, would no longer be disposed to perform without charge these services for the country bank; and further, having ceased to be the country bank's reserve agent, the city bank would be very likely to compete for some of the country bank's most attractive business. Obviously if the new federal reserve banks were to displace city correspondent banks as the holders of the country banks' deposited reserves, they should also perform for the country banks the

service of collecting or clearing their out-of-town checks.¹ To this end the federal reserve act provides that the federal reserve board "may at its discretion exercise the functions of a clearing house for . . . federal reserve banks, or may designate a federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks" (Section 16). The same section of the law also requires federal banks to "receive on deposit at par from member banks or from federal reserve banks checks and drafts drawn upon any of its depositors, and when remitted by a federal reserve bank, checks and drafts drawn by any depositor in any other federal reserve bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank."

Member banks are permitted to make collection and exchange charges on customers sufficient to cover the actual expenses involved in the collection and remittance of funds. The federal re-

¹ Dr. H. Parker Willis, formerly Secretary of the Federal Reserve Board, states concisely the distinction between collecting and clearing checks, as follows: "A check is said to be collected when it is sent home to the bank on which it is drawn, and arrangement is made to remit the proceeds; it is said to be cleared when the bank receiving it offsets it against checks in favor of the institution by which it is to be paid, and then collects or remits only the balance, if any." *The Federal Reserve*, page 223.

serve board is authorized to fix collection charges for items handled through federal reserve banks.

The problem of establishing a satisfactory clearing and collection system was looked upon as perhaps the most difficult and complicated one confronting the federal reserve authorities in the early days of the new system. At first the federal reserve authorities moved slowly and allowed the different reserve banks a wide discretion in the matter of arrangements for the clearing and collection of checks. Moreover, in most districts the utilization of the clearing and collection system established by the federal reserve bank was optional with member banks. Some joined the system and many did not. It early became evident that to be really effective a clearing and collection system needed to be approximately uniform in its workings throughout the country and to embrace the largest possible number of banks; a system in which a moderate number of banks utilized the federal-reserve clearing and collection system and a large number handled their checks in the old way was unsatisfactory. It meant a wasteful duplication of machinery analogous to that which exists when a city has two separate telephone services. After nearly two years of experimentation, therefore, the federal reserve board promulgated a clearing and col-

lection system, which was put into operation July 5, 1916, in all federal reserve districts—a system whose privileges under certain limitations were extended by an amendatory act of June 21, 1917, to qualifying banks which are not regular members of the federal reserve system.

Present Clearing and Collection System

Briefly summarized, the main features of the new plan, as revised to date (November 1, 1918) are as follows:²

Each federal reserve bank exercises the functions of a clearing house in its district for member banks and for qualified non-member banks, known as "clearing member banks." From such banks in its district the federal reserve bank will receive at par "checks drawn on all member and clearing member banks and on all other non-member banks, which agree to remit at par through the federal reserve bank of their district." Clearing and collection services for member and clearing member banks and for other federal reserve banks are also rendered by each federal reserve bank in the case of checks received from outside the district, which are drawn upon

² The Federal Reserve Board's revised regulations concerning the clearing and collection of checks constitute "Regulation J, Series of 1917," and are published in the Federal Reserve Bulletin of July 1, 1917, pages 549-550.

member and clearing member banks of its district and upon all other non-member banks of its district, whose checks can be collected at par by the federal reserve bank. These two provisions make the field of the par clearing and collection system coextensive with the United States and provide a machinery for the handling of checks received from practically all important points without the district as well as from within the district. All banks belonging to the clearing system are required to pay without deduction checks drawn upon themselves, when presented at their own counters. In August, 1919, there belonged to the federal reserve clearing system 8,294 member banks and 10,206 clearing member banks,³ together representing approximately two-thirds of the banks of the country in number, but representing the great bulk of the commercial banking power of the country, since the commercial banks remaining outside the system are for the most part small ones. At that time the federal reserve clearing system was handling about 533,000 checks daily (exclusive of those drawn on the Treasurer of the United States) representing approximately \$362,000,000, or a sum equal to about two-fifths of the total clearings of all the clearing houses of the country.

³ Federal Reserve Bulletin, September 1, 1919, page 886.

The old evil previously described (pages 21-22) of carrying the "float" as a part of a bank's legal reserve is eliminated by a provision to the effect that, although checks received by the federal reserve bank will be immediately credited (subject to final payment) to the bank sending them, the proceeds thereof "will not be counted as part of the minimum reserve, nor become available to meet checks drawn until actually collected." If the bank sending in checks is not to be permitted to draw against the credit which they create until they have been collected, obviously the checks should not be charged by the federal reserve bank against the reserve account of the bank upon which they are drawn until sufficient time has elapsed "for the checks to have reached the member bank and for returns in due course to have reached the federal reserve banks."⁴ This is the rule now in force.

If a bank's deposit at the federal reserve bank is insufficient to cover its legal reserve requirement and in addition to meet an adverse balance, which arises against it out of clearing operations, it is authorized to ship currency or specie from its own vaults at the expense of its federal reserve bank in order to cover the deficiency. In case of

⁴ See Third Annual Report of Federal Reserve Board, 1916, pages 9-12.

a deficient balance at the federal reserve bank, the member bank, of course, also has the privilege of making good the deficiency by rediscounting eligible paper or by discounting with the federal reserve bank its own fifteen day notes secured by eligible collateral.

In handling items for member and clearing member banks, a federal reserve bank acts as agent only.

Under the federal reserve clearing and collection system checks are sent to federal reserve banks and to member and clearing member banks by the most direct routes, and the number of par collection points in the United States is made almost equal to the number of places of any considerable size where commercial banks are located. The result is that the new system is rapidly doing away with the old evil of routing checks.

The cost of collecting and clearing checks for member and clearing member banks is borne by the federal reserve banks. For some time service charges of so much per item were imposed. But these charges, so far as they relate to cash items, were discontinued by an order of the federal reserve board effective June 15, 1918.⁵

The new system does not deny to member

⁵ See Federal Reserve Bulletin, May 1, 1918, pages 371-372.

banks and clearing member banks the right to make a charge against other banks (aside from federal reserve banks) and against their own customers for the collection of out-of-town checks and drafts received over their counters. It does require, however, that these charges shall be reasonable, the reasonableness to be determined by the federal reserve board, and that in no event shall the charge exceed one-tenth of one per cent.

Banks which formerly charged their customers excessive rates for collection are accordingly being forced by competition or by the board's regulations to reduce their charges, while an increasing number of banks appear to be giving up all collection charges on demand items. They may, as a compensation, require customers to carry larger balances, or they may find the expense a productive one as an item of advertising.

Recently the collection service has been extended to items other than checks such as promissory notes, trade bills, time drafts, coupons, acceptances and the like, an obvious need if the federal reserve banks are to serve member banks as adequate substitutes for the member banks' former reserve agents. Such items, when payable at places where the federal reserve banks have satisfactory arrangements for collecting checks

through banks, are collected by federal reserve banks for member banks without any charge other than any exchange charge that may be made by the collecting bank. Upon items returned unpaid, however, there is imposed an additional charge of 15 cents, with the object of preventing the clogging of the federal reserve collection system with dunning drafts.

The Gold Settlement Fund

One serious difficulty of the old collection system, as we have seen (pages 22-23), was the need of numerous and expensive shipments of currency back and forth over the country as the seasonal stresses in the trade demands for currency shifted from one section to another. The new system absolutely eliminates the necessity of a large proportion of these currency shipments and both reduces the expense of those shipments which do take place and lightens its burden by distributing it.

The mechanism by which the necessity of a large proportion of these currency shipments is avoided is that of the Gold Settlement Fund, and the separate but similar Federal Reserve Agents' Fund. The gold settlement fund, although planned in its essentials early in 1914, was not established until June, 1915. The order of the

federal reserve board establishing this fund⁶ requires each federal reserve bank to forward to the treasury or the nearest sub-treasury of the United States for credit to the account of the gold settlement fund \$1,000,000 in gold or gold certificates, and in addition an amount at least equal to its indebtedness due to all federal reserve banks. These sums are made payable to the order of the federal reserve board. Each federal reserve bank is required to maintain a balance in the fund of not less than \$1,000,000. As a matter of fact all the banks carry balances very many times as large as this minimum. Credit on the books of the gold settlement fund is counted as a part of a federal reserve bank's legal reserve. The settlement of balances between federal reserve banks is effected daily through the instrumentality of telegrams sent to the federal reserve board, by transfers of debits and credits on the books of the gold settlement fund.

A separate fund similarly constituted is the Federal Reserve Agents' Fund. Federal reserve agents, it will be recalled, have large funds in their custody, representing gold pledged with them as security for federal reserve notes.

Through the machinery of the gold settlement fund and the federal reserve agents' fund, trans-

⁶ Regulation L. Series of 1915.

fers may be made among all the federal reserve banks, between any federal reserve bank and any federal reserve agent, and between any federal reserve bank or any federal reserve agent and the treasury or any sub-treasury of the United States.

By means of the gold settlement fund, and of the other transfer facilities of the federal reserve banks, these banks are now enabled to make telegraphic transfers of funds to any part of the United States for their members without any charge whatever. They have also been able to inaugurate a system of federal reserve exchange drafts, according to which a member bank may draw special drafts on its federal reserve bank for amounts not exceeding \$5,000, which are receivable for immediate availability at any other federal reserve bank.

The gold settlement fund system of transfers has almost eliminated the necessity of shipping money (other than federal reserve notes) between federal reserve banks. On September 12, 1919, that fund amounted in round numbers to \$538 millions, while the federal reserve agents' fund amounted to \$854 millions, making a total of \$1,392 millions. The combined clearings and transfers for these funds sometimes amount to over a billion dollars in a week. These opera-

tions involve very small changes in the ownership of gold in the funds, sometimes less than 2 per cent of their amount.

The federal reserve clearing and collection system is therefore providing a means of eliminating the evils of the old system. Excessive collection charges are rapidly becoming things of the past. Banks are enabled to dispense with the necessity of tying up large sums in scattered deposits with correspondent banks at low rates of interest for the purpose of securing for themselves adequate facilities for the collection of checks. These deposits can now be brought home and the funds loaned out at much better interest rates. The routing of checks is being eliminated and the "float" is being greatly reduced, all of which are important gains to the public. Heavy currency shipments are avoided, and the expenses of a large part of the currency shipments that do take place are assumed by the federal reserve banks for the member banks. These economies that are being realized by the new system are an important factor in the forces that have made possible the recent great reduction in the reserve requirements of American banks, a reduction which involves a saving of many millions of dollars annually.

Foreign Exchange

The federal reserve law has brought about important reforms in the matter of financing our foreign trade. The rediscount machinery created by our twelve federal reserve banks is doing much toward developing an American discount market. This development is being expedited by the heavy demands for American funds on the part of foreign nations, caused by the war and by the disruption of foreign money markets. Much of our foreign trade that was formerly financed through letters of credit, under which bills expressed in sterling were drawn, is now being financed directly by means of dollar exchange, namely, bills drawn on banks and business houses in the United States and payable in dollars. Banks are willing to buy such paper drawn in connection with our import and export trade, because there is now a ready market for its sale and rediscount—a market created largely by the federal reserve system. Furthermore, bank acceptances in connection with foreign trade are now legalized in the United States, under certain restrictions, and importers may now arrange with American banks to have their foreign exporters draw bills in dollars directly on the importer's bank on the United States; while foreign importers may open credits in

American banks upon which American exporters may draw, the bills being accepted by the American bank and sold in the American discount market.

Federal reserve banks have established agencies abroad, in England with the Bank of England; in France with the Bank of France; in the Philippines, with the National Bank of the Philippines; in Italy with the Bank of Italy; in Japan with the Bank of Japan; in Sweden with the National Bank of Sweden; and in Norway with the Bank of Norway. The foreign exchange division created by the federal reserve board in December, 1917, rendered valuable service during the war in stabilizing exchange both with our allies and with neutrals.

Under the provisions of the federal reserve act, national banks with a capital and surplus of a million dollars or over may be authorized under certain restrictions to establish branches abroad; and many such branches have already been established. National banks may furthermore invest to an amount not exceeding 10 per cent of their capital and surplus in the stock of banks chartered in the United States and principally engaged in international or foreign banking or banking in American dependencies, and enjoying the privilege of establishing branches abroad. In this way a number of banks have been estab-

lished which are owned either wholly or in part by groups of national banks, and one of them already has 48 national banks as stockholders.

As a result of war conditions and of these changes in our banking system, we are now financing directly an increasing proportion of our foreign trade, and while this proportion may decline after the war, it will probably never go back to the old pre-war figures. As regards the financing at home of our foreign trade, the federal reserve system was established at the opportune time. It is proving to be a great influence in the internationalizing of American trade and American finance.

CHAPTER IX

THE FEDERAL RESERVE SYSTEM AND THE FEDERAL TREASURY

The fourth and last of the general defects of the old banking system, which were discussed in the early part of this book, was the defective organization of the old system from the standpoint of the federal treasury. How is the federal reserve system remedying this defect?

The provisions of the federal reserve act concerning the deposit of government funds are in section 15. They are: "The moneys held in the general fund of the treasury, except the five per centum fund for the redemption of outstanding national-bank notes, and the funds provided in this act for the redemption of federal reserve notes may, upon the direction of the Secretary of the Treasury, be deposited in federal reserve banks, which banks, when required by the Secretary of the Treasury, shall act as fiscal agents of the United States; and the revenues of the Government or any part thereof may be deposited in

such banks, and the disbursements may be made by checks drawn against such deposits.

“No public funds of the Philippine Islands, or of the postal savings,¹ or any government funds, shall be deposited in the continental United States in any bank not belonging to the system established by this act;,² provided, however, that nothing in this act shall be construed to deny the right of the Secretary of the Treasury to use member banks as depositories.”

Many of the advocates of the federal reserve system believed that this section did not go far enough. They believed that the practice of depositing government funds in thousands of banks scattered over the country was a vicious and expensive one, and wished the new law to make the federal reserve banks the depositories of practically all general funds, dispensing with the use of individual banks as depositories and ultimately with the independent treasury system. It was felt by many, however, that the immediate adoption of such a plan would be moving too rapidly and that it was undesirable to limit so narrowly the Secretary of the Treasury, who is

¹ The law was later amended so as to authorize, under certain conditions, the deposit of postal savings funds in banks not members of the federal reserve system. See E. W. Kemmerer, *Postal Savings*, pages 112-116.

² But see pages 86-87.

responsible for the safety of government funds. The extent to which the Secretary of the Treasury should keep general funds in the federal reserve banks, in member banks, and in the sub-treasuries was, therefore, left to his discretion. There appears, however, to have been a widespread belief that the federal reserve banks would become to an increasing extent the depositories of federal funds, and that national banks and the sub-treasuries would, as time went on, receive an ever declining proportion of these funds. The Secretary of the Treasury is a member of the federal reserve board, and there is much to be said in favor of the proposition that banks desiring government funds should present their claims for advances to their federal reserve bank, and should receive such funds only by the ordinary method of rediscount. This would simplify the problem, remove from the Secretary of the Treasury the onerous task of apportioning funds among thousands of individual banks, and discourage the banks from depending upon the Secretary of the Treasury as a sort of grandfather for aid in time of need. The federal reserve bank, which is having continual dealings with all its member banks, would presumably be in a better position to judge the comparative needs of different banks than would the Secretary of the

Treasury. Moreover, how could a federal reserve bank place adequate pressure on member banks to conserve their strength in time of need, to advance discount rates, to contract loans, etc., if the member banks could "go around" the federal reserve bank and the federal reserve board and get funds directly from the Secretary of the Treasury?

For these and other reasons it was expected that the Secretary of the Treasury, in the exercise of the discretion granted him by the law, would deposit his funds in a large and increasing degree in federal reserve banks. Events pointed clearly in this direction prior to our entrance into the war. Governor Strong of the New York Federal Reserve Bank writes me: "The first deposit of government funds made by the treasury with the federal reserve banks was on September 4, 1915, when certain special deposits were made in a number of banks. Later, arrangements were made to have the collectors of customs and collectors of internal revenues in the twelve federal reserve bank cities deposit all of their funds in the federal reserve banks and as a matter of fact, for a long period prior to the passage of the bond act of April 24, 1917, which altered the status of public deposits, the federal reserve banks had been receiving the principal

revenues of the Government outside of postal funds and had been paying a very large proportion of government checks and warrants. The limitation of this fiscal agency service in the collection of revenues and payment of checks to the twelve federal reserve bank cities was, of course, due to the inconvenience of extending these operations to places where federal reserve banks had not yet established branches. The plan therefore of actively employing the federal reserve banks as fiscal agents had been put into operation some time before the first bond bill was passed and was an important and very active part of the work of the reserve banks almost immediately after the arrangement was established."

The abnormal conditions, however, created by the European War set up obstacles in the way of the Government's discontinuing the use of individual banks as depositaries of government funds. During the early days of the war the heavy demands for funds in America to meet obligations due abroad and the frenzied condition of the money markets throughout the world naturally prevented the inauguration of a policy of withdrawing government funds from individual banks and depositing them in the federal reserve banks. Later the heavy buying in this country by European belligerents discouraged such a

policy. Such was not a time for withdrawing large sums from individual banks. Finally our own entrance into the war and the floating of our huge Liberty loans rendered a transfer of this kind out of the question. In the interest of causing a minimum of disturbance to the money market in the floating of these loans, the Government wisely adopted the policy of keeping the funds widely scattered and to as large an extent as practicable in the banks of the communities where they were received. The result is that in recent times there have been more government funds in individual banks than at any previous period in our history. The deposit of government funds, moreover, is no longer limited to banks that are members of the federal reserve system, since the law under which all government bonds and certificates of indebtedness have been issued since we entered the war provides for the deposit of their proceeds in qualified national banks and state banks and trust companies against certain approved collateral. Numerous nonmember banks therefore have qualified as depositories in connection with our Liberty loans.

What will be the Government's policy in this matter after the abnormal conditions resulting from the war have passed, of course, it is impossible to say at this time.

As fiscal agents of the Government, the federal reserve banks rendered the nation services of incalculable value after our entrance into the war, services in connection with the issuance of our large Liberty loans and our ad-interim treasury notes, with a minimum disturbance to our money markets. They aided greatly in the conservation of our gold resources, in the regulation of our foreign exchanges, and in general in the centralization and efficient utilization of our financial energies. In this time of great emergency the federal reserve system was a bulwark to our national finance. One shudders when he thinks what might have happened if the war had found us with our former decentralized and antiquated banking system. Think of pouring the crisis of 1914-1918 into bottles that broke with the crisis of 1907!

The post-war situation demands in financial matters the maximum of efficiency. If we are to do our part in solving the tremendous financial problems of world reconstruction, we must make every dollar count to the utmost. This means the coordination of all parts of our banking system. It means integration under a responsible central control, and it means administration with sole regard to national welfare. Upon this subject we may conclude this book with the

words of President Wilson, made public October 13, 1917. They apply to the period of reconstruction as truly as they did to the period of the war:

"It is manifestly imperative that there should be a complete mobilization of the banking reserves of the United States. All who are familiar with financial operations must appreciate the importance of developing to the maximum our banking power and of providing financial machinery adequate for meeting the very great financial requirements imposed upon our country by reason of the war. A vigorous prosecution and satisfactory termination of the war will depend in no small degree upon the ability of the Government not only to finance itself, but also to aid the governments associated with it in the war, which must be kept supplied with munitions, fuel, food, and supplies of all kinds. The banking problem involved is one which concerns all banks alike. Its solution does not depend upon the national banks alone, nor upon the state banks. The burden and the privilege must be shared by every banking institution in the country. . . .

"The extent to which our country can withstand the financial strains for which we must be prepared will depend very largely upon the

strength and staying power of the federal reserve banks. . . .

“Many of the largest state banks and trust companies are now becoming members, realizing that to win the war we must conserve all of the physical, financial, and moral resources of our country—that our finances must rest on the firmest possible foundation, and that they must be adequately and completely conserved so as to respond instantly to every legitimate demand. How can this necessary condition be brought about and be made permanently effective better than by the concentration of the banking strength of our country in the federal reserve system? . . .

“I believe that cooperation on the part of the banks is a patriotic duty at this time, and that membership in the federal reserve system is a distinct and significant evidence of patriotism.”

APPENDIX A

COMBINED BALANCE SHEET OF TWELVE FEDERAL RESERVE BANKS, SEPTEMBER 12, 1919, AND BRIEF EXPLANATIONS OF THE VARIOUS ITEMS

Resources

Gold coin and certificates in vault ¹	\$231,609,000
Gold settlement fund—federal reserve board ²	537,723,000
Gold in transit or in custody in foreign countries ³	158,232,000
Total gold held by banks.....	927,564,000
Gold with federal reserve agents ⁴	1,190,769,000
Gold redemption fund ⁵	108,766,000
Total gold reserve.....	2,227,099,000
Legal tender notes, silver, etc. ⁶	69,632,000
Total reserves including gold in transit and in custody in foreign countries..	2,296,731,000
Bills discounted, including bills secured by government war obligations ⁷	1,754,838,000
Bills bought in open market ⁸	362,005,000
Total bills on hand.....	2,116,843,000
U. S. Government long-term securities ⁹	27,288,000
U. S. Government short-term securities ¹⁰ ...	341,655,000
All other earning assets ¹¹	0,000,000
Total earning assets, including gold in transit or in custody in foreign countries	2,644,018,000

Bank premises ¹²	\$13,143,000
Uncollected items and other deductions from gross deposits ¹³	873,066,000
Five per cent redemption fund against fed- eral reserve bank notes ¹⁴	11,343,000
All other resources ¹⁵	11,007,000
Total resources	5,691,076,000

Liabilities

Capital paid in ¹⁶	\$85,140,000
Surplus ¹⁷	81,087,000
Government deposits ¹⁸	33,584,000
Due to members—reserve account ¹⁹	1,802,791,000
Deferred availability items ²⁰	679,043,000
All other deposits ²¹	134,096,000
Total gross deposits	2,649,514,000
Federal reserve notes in actual circulation ²²	2,621,228,000
Federal reserve bank notes in circulation, net liability ²³	228,169,000
All other liabilities ²⁴	25,938,000
Total liabilities	5,691,076,000

¹ This represents reserve money held in the vaults of federal reserve banks against deposits and federal reserve notes. See text, pp. 52, 58-60; and Act, sec. 16, par. 3.

² This is a gold fund held in the United States treasury by the federal reserve board, in trust for the federal reserve banks, and the money it contains is transferred from one federal reserve bank to another or to or from the treasurer of the United States by means of debits and credits on books kept by the federal reserve board in Washington. Gold held in the fund to the credit of any federal reserve bank is counted as lawful reserve money against federal reserve notes or deposits. See text, pp. 75-76; and Act, sec. 2, 3d, and 4th pars. from last.

³ Federal reserve banks have established agencies in a number of foreign countries, and, as a matter of convenience as well as

to avoid shipping risks and expenses, some of the federal reserve banks keep gold in the vaults of these foreign agencies. See text, p. 80; and Act, sec. 14, par. (e).

⁴ This is gold deposited with federal reserve agents as collateral for the issue of federal reserve notes. See text, pp. 51-52; and Act, sec. 16, pars. 2-7.

⁵ The gold redemption fund here mentioned is a fund held by the treasurer of the United States for the redemption of federal reserve notes in gold on demand. It is made up of deposits of gold from each federal reserve bank. Each bank's deposit must be sufficient in the judgment of the Secretary of the Treasury for the redemption of such federal reserve notes of the bank as are likely to be presented at the treasury for redemption; but in no case can the fund be less than five per cent of the total amount of notes issued less the amount of gold held by the federal reserve agents as collateral security for notes. Gold in the redemption fund is counted as part of the legal reserve required against federal reserve notes. See text, pp. 51-52; and Act, sec. 16, par. 4.

⁶ This item covers all kinds of money held by federal reserve banks except gold coin and gold certificates.

⁷ This represents advances made by federal reserve banks to member banks. It consists of short-time commercial bills, notes, and bank acceptances, which have been rediscounted for member banks, and of one to fifteen day loans made to member banks against their notes collateralized by United States government securities and by commercial paper. The Federal Reserve Bulletin of each month gives an analysis of the kinds and maturities of the paper held. See text, pp. 61-64; Act, sec. 13, pars. 2-6; and Regulation A issued by the federal reserve board, June 22, 1917, Federal Reserve Bulletin, July 1, 1917, pp. 539-541.

⁸ The kinds of open-market operations which federal reserve banks may carry on are described in section 14 of the Act. See also text, pp. 42-44; and Regulation B issued by the federal reserve board, June 22, 1917, Federal Reserve Bulletin July 1, 1917, pp. 541-542.

⁹ These are United States government bonds, chiefly Liberty bonds, owned by federal reserve banks.

¹⁰ These are mostly short-time treasury certificates of indebtedness issued in anticipation of Liberty bond issues.

¹¹ This item usually consists largely of municipal warrants.

¹² Nine of the twelve federal reserve banks own bank premises, but some of the banks are not yet occupying their own premises.

¹³ These are items in process of collection, chiefly under the federal reserve clearing and collection system. See text, pp. 19-23; Act, sec. 16, pars. 14-18; and Regulation J issued by federal reserve board, June 22, 1917, Federal Reserve Bulletin, July 1, 1917, pp. 549-550.

¹⁴ Federal reserve bank notes are bond-secured bank notes, issued by federal reserve banks, in place of bond-secured national bank notes and silver certificates retired. (See note 23 below.) Except for the fact that they are issued by federal reserve banks, they are essentially like national bank notes. As in the case of the latter, the law requires that, for the purpose of their redemption in Washington, a five per cent redemption fund be maintained by the issuing bank in the United States treasury. See text, pp. 50-51; Act, sec. 18, par. 6; Act of June 20, 1874, sec. 3; and Act of April 23, 1918, secs. 5-8 (Appendix E).

¹⁵ This represents the net debit balance on a variety of accounts, including profit and loss account, gross earnings account, expense account, depreciation account, suspense account, unearned discount account, and the like.

¹⁶ The law requires every member bank to subscribe to stock in the federal reserve bank of its district to the amount of six per cent of the member bank's paid-in capital and surplus. One half of this subscription has already been paid and the other half is subject to the call of the federal reserve board. This item in the balance sheet accordingly represents three per cent of the combined paid-in capital and surplus of all member banks. See text, p. 31; and Act, sec. 2, par. 3.

¹⁷ The law provides that member banks shall receive out of the earnings of their federal reserve bank an annual, six per cent, cumulative dividend on their paid-in capital stock, and that the balance of the net earnings shall be paid to the United States Government as a franchise tax, "except that one-half of such net earnings shall be paid into a surplus fund until it shall amount to forty per centum of the paid-in capital stock of such bank." See text, p. 59; and Act, sec. 7, par. 1.

¹⁸ The law authorizes the Secretary of the Treasury to use federal reserve banks as depositaries of public funds, except of certain specified trust funds. The Secretary began depositing public funds in federal reserve banks as early as September 4, 1915, and since that time has continually and extensively employed federal reserve banks as depositaries. Legal reserve requirements do not apply to deposits of government funds. See text, pp. 82-87; and Act, sec. 15; also Act of April 24, 1917, sec. 7; and Act of September 24, 1917, sec. 8.

¹⁹ Member banks are required by law to keep their entire legal reserves on deposit in the federal reserve bank of their district. See text, pp. 35-38; and Act, sec. 19.

²⁰ These are liabilities of federal reserve banks to member banks and clearing-member banks arising out of the federal reserve clearing and collection system. They represent items in process of collection, the proceeds of which are not yet available to be drawn upon by the creditor banks. See text, pp. 70-75; and references cited in note 13 above.

²¹ This covers deposit credits of certain non-member banks in the United States, of certain foreign banks of which the federal reserve banks are the American agencies, and of certain foreign governments. See text, pp. 70-71, 80; Act, sec. 14, par. (e); and Regulation J issued by the federal reserve board June 22, 1917, Federal Reserve Bulletin, July 1, 1917, pp. 549-550.

²² This item represents the total amount of federal reserve notes issued to the federal reserve banks and now outstanding (exclusive of the amount now held by federal reserve banks. See text, pp. 51-57; and Act, sec. 16.

²³ These are the federal reserve bank notes described above in note 14. The net liability represents the total amount outstanding less the amount of cash deposited with the treasurer of the United States for the retirement of such notes. See text, pp. 50-51; Act of March 4, 1907, sec. 4 amending Act of July 12, 1882.

²⁴ This represents the net credit balance on a variety of miscellaneous accounts. It includes the excess of earned and unearned discount and interest over expenses and certain unproductive assets. Compare note 15 above.

APPENDIX B

FEDERAL RESERVE ACT

(APPROVED DEC. 23, 1913)

As amended Aug. 4, 1914 (38 Stat., 682; Chap. 225); Aug. 15, 1914 (38 Stat., 691; Chap. 252); Mar. 3, 1915 (38 Stat., 958; Chap. 93); Sept. 7, 1916 (39 Stat., 752; Chap. 461); June 21, 1917 (40 Stat., Chap. 32); and Sept. 26, 1918.

An Act To provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the short title of this Act shall be the "Federal Reserve Act."

Definitions
of terms.

Wherever the word "bank" is used in this Act, the word shall be held to include State bank, banking association, and trust company, except where national banks or Federal reserve banks are specifically referred to.

The terms "national bank" and "national banking association" used in this Act shall be held to be synonymous and interchangeable. The term "member bank" shall be held to mean any national bank, State bank, or bank or trust company which has become a member of one of the reserve banks created by this Act. The term "board" shall be held to mean Federal Re-

serve Board; the term "district" shall be held to mean Federal reserve district; the term "reserve bank" shall be held to mean Federal reserve bank.

FEDERAL RESERVE DISTRICTS

SEC. 2. As soon as practicable, the Secretary of the Treasury, the Secretary of Agriculture and the Comptroller of the Currency, acting as "The Reserve Bank Organization Committee," shall designate not less than eight nor more than twelve cities to be known as Federal reserve cities, and shall divide the continental United States, excluding Alaska, into districts, each district to contain only one of such Federal reserve cities. The determination of said organization committee shall not be subject to review except by the Federal Reserve Board when organized: *Provided*, That the districts shall be apportioned with due regard to the convenience and customary course of business and shall not necessarily be coterminous with any State or States. The districts thus created may be readjusted and new districts may from time to time be created by the Federal Reserve Board, not to exceed twelve in all. Such districts shall be known as Federal reserve districts and may be designated by number. A majority of the organization committee shall constitute a quorum with authority to act.

Determina-
tion of dis-
tricts.

Said organization committee shall be authorized to employ counsel and expert aid, to take testimony, to send for persons and papers, to administer oaths, and to make such investigation as may be deemed necessary by the said committee in determining the reserve districts and in designating the cities within such districts where such Federal reserve banks shall be severally located. The said committee shall su-

pervise the organization in each of the cities designated of a Federal reserve bank, which shall include in its title the name of the city in which it is situated, as "Federal Reserve Bank of Chicago."

National banks required to join system; state banks and trust companies permitted to join.

Under regulations to be prescribed by the organization committee, every national banking association in the United States is hereby required, and every eligible bank in the United States and every trust company within the District of Columbia, is hereby authorized to signify in writing, within sixty days after the passage of this Act, its acceptance of the terms and provisions hereof. When the organization committee shall have designated the cities in which Federal reserve banks are to be organized, and fixed the geographical limits of the Federal reserve districts, every national banking association within that district shall be required within thirty days after notice from the organization committee, to subscribe to the capital stock of such Federal reserve bank in a sum equal to six per centum of the paid-up capital stock and surplus of such bank, one-sixth of the subscription to be payable on call of the organization committee or of the Federal Reserve Board, one-sixth within three months and one-sixth within six months thereafter, and the remainder of the subscription, or any part thereof, shall be subject to call when deemed necessary by the Federal Reserve Board, said payments to be in gold or gold certificates.

Stock subscriptions.

Double liability of stockholders.

The shareholders of every Federal reserve bank shall be held individually responsible, equally and ratably, and not one for another, for all contracts, debts, and engagements of such bank to the extent of the amount of their subscriptions to such stock at the par value thereof in addition to the amount subscribed, whether

such subscriptions have been paid up in whole or in part, under the provisions of this Act.

Any national bank failing to signify its acceptance of the terms of this Act within the sixty days aforesaid, shall cease to act as a reserve agent, upon thirty days' notice, to be given within the discretion of the said organization committee or of the Federal Reserve Board.

Should any national banking association in the United States now organized fail within one year after the passage of this Act to become a member bank or fail to comply with any of the provisions of this Act applicable thereto, all of the rights, privileges, and franchises of such association granted to it under the national-bank Act, or under the provisions of this Act, shall be thereby forfeited. Any noncompliance with or violation of this Act shall, however, be determined and adjudged by any court of the United States of competent jurisdiction in a suit brought for that purpose in the district or territory in which such bank is located, under direction of the Federal Reserve Board, by the Comptroller of the Currency in his own name before the association shall be declared dissolved. In cases of such noncompliance or violation, other than the failure to become a member bank under the provisions of this Act, every director who participated in or assented to the same shall be held liable in his personal or individual capacity for all damages which said bank, its shareholders, or any other person shall have sustained in consequence of such violation.

Such dissolution shall not take away or impair any remedy against such corporation, its stockholders or officers, for any liability or penalty which shall have been previously incurred.

Should the subscriptions by banks to the stock of said Federal reserve banks or any one or more of them be, in the judgment of the organi-

National banks not joining system forfeit their charters.

Penalties for noncompliance with act.

Public subscriptions to stock to be authorized under certain contingencies.

zation committee, insufficient to provide the amount of capital required therefor, then and in that event the said organization committee may, under conditions and regulations to be prescribed by it, offer to public subscription at par such an amount of stock in said Federal reserve banks, or any one or more of them, as said committee shall determine, subject to the same conditions as to payment and stock liability as provided for member banks.

No individual, copartnership, or corporation other than a member bank of its district shall be permitted to subscribe for or to hold at any time more than \$25,000 par value of stock in any Federal reserve bank. Such stock shall be known as public stock and may be transferred on the books of the Federal reserve bank by the chairman of the board of directors of such bank.

U. S. Gov-
ernment may
subscribe for
stock if banks
and public fail
to subscribe
adequately.

Should the total subscriptions by banks and the public to the stock of said Federal reserve banks, or any one or more of them, be, in the judgment of the organization committee, insufficient to provide the amount of capital required therefor, then and in that event the said organization committee shall allot to the United States such an amount of said stock as said committee shall determine. Said United States stock shall be paid for at par out of any money in the Treasury not otherwise appropriated, and shall be held by the Secretary of the Treasury and disposed of for the benefit of the United States in such manner, at such times, and at such price, not less than par, as the Secretary of the Treasury shall determine.

Stock not held by member banks shall not be entitled to voting power.

The Federal Reserve Board is hereby empowered to adopt and promulgate rules and regulations governing the transfers of said stock.

No Federal reserve bank shall commence business with a subscribed capital less than \$4,000,000. The organization of reserve districts and Federal reserve cities shall not be construed as changing the present status of reserve cities and central reserve cities, except in so far as this Act changes the amount of reserves that may be carried with approved reserve agents located therein. The organization committee shall have power to appoint such assistants and incur such expenses in carrying out the provisions of this Act as it shall deem necessary, and such expenses shall be payable by the Treasurer of the United States upon voucher approved by the Secretary of the Treasury, and the sum of \$100,000, or so much thereof as may be necessary, is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, for the payment of such expenses.

Expenses of
Organization
Committee.

BRANCH OFFICES

SEC. 3.¹ The Federal Reserve Board may permit or require any Federal reserve bank to establish branch banks within the Federal reserve district in which it is located or within the district of any Federal reserve bank which may have been suspended. Such branches, subject to such rules and regulations as the Federal Reserve Board may prescribe, shall be operated under the supervision of a board of directors to consist of not more than seven nor less than three directors, of whom a majority of one shall be appointed by the Federal reserve bank of the district, and the remaining directors by the Federal Reserve Board. Directors of branch banks shall hold office during the pleasure of the Federal Reserve Board.

¹ As amended by act approved June 21, 1917 (40 Stat., chap. 32).

FEDERAL RESERVE BANKS

Applications
for member-
ship.

SEC. 4.² When the organization committee shall have established Federal reserve districts as provided in section two of this Act, a certificate shall be filed with the Comptroller of the Currency showing the geographical limits of such districts and the Federal reserve city designated in each of such districts. The Comptroller of the Currency shall thereupon cause to be forwarded to each national bank located in each district, and to such other banks declared to be eligible by the organization committee which may apply therefor, an application blank in form to be approved by the organization committee, which blank shall contain a resolution to be adopted by the board of directors of each bank executing such application, authorizing a subscription to the capital stock of the Federal reserve bank organizing in that district in accordance with the provisions of this Act.

Certificates
of organiza-
tion.

When the minimum amount of capital stock prescribed by this Act for the organization of any Federal reserve bank shall have been subscribed and allotted, the organization committee shall designate any five banks of those whose applications have been received, to execute a certificate of organization, and thereupon the banks so designated shall, under their seals, make an organization certificate which shall specifically state the name of such Federal reserve bank, the territorial extent of the district over which the operations of such Federal reserve bank are to be carried on, the city and State in which said bank is to be located, the amount of capital stock and the number of shares into which the same is divided, the name and place of doing business of each bank executing such certificate,

² As amended by act approved June 21, 1917 (40 Stat., chap. 32).

and of all banks which have subscribed to the capital stock of such Federal reserve bank and the number of shares subscribed by each, and the fact that the certificate is made to enable those banks executing same, and all banks which have subscribed or may thereafter subscribe to the capital stock of such Federal reserve bank, to avail themselves of the advantages of this Act.

The said organization certificate shall be acknowledged before a judge of some court of record or notary public; and shall be, together with the acknowledgment thereof, authenticated by the seal of such court, or notary, transmitted to the Comptroller of the Currency, who shall file, record and carefully preserve the same in his office.

Upon the filing of such certificate with the Comptroller of the Currency as aforesaid, the said Federal reserve bank shall become a body corporate, and as such, and in the name designated in such organization certificate, shall have power—

Powers of
Federal re-
serve banks.

First. To adopt and use a corporate seal.

Second. To have succession for a period of twenty years from its organization unless it is sooner dissolved by an Act of Congress, or unless its franchise becomes forfeited by some violation of law.

Third. To make contracts.

Fourth. To sue and be sued, complain and defend, in any court of law or equity.

Fifth. To appoint by its board of directors such officers and employees as are not otherwise provided for in this Act, to define their duties, require bonds of them and fix the penalty thereof, and to dismiss at pleasure such officers or employees.

Sixth. To prescribe by its board of directors,

by-laws not inconsistent with law, regulating the manner in which its general business may be conducted, and the privileges granted to it by law may be exercised and enjoyed.

Seventh. To exercise by its board of directors, or duly authorized officers or agents, all powers specifically granted by the provisions of this Act and such incidental powers as shall be necessary to carry on the business of banking within the limitations prescribed by this Act.

Federal re-
serve bank
notes.

Eighth. Upon deposit with the Treasurer of the United States of any bonds of the United States in the manner provided by existing law relating to national banks, to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited, such notes to be issued under the same conditions and provisions of law as relate to the issue of circulating notes of national banks secured by bonds of the United States bearing the circulating privilege, except that the issue of such notes shall not be limited to the capital stock of such Federal reserve bank.

But no Federal reserve bank shall transact any business except such as is incidental and necessarily preliminary to its organization until it has been authorized by the Comptroller of the Currency to commence business under the provisions of this Act.

Duties of
board of direc-
tors.

Every Federal reserve bank shall be conducted under the supervision and control of a board of directors.

The board of directors shall perform the duties usually appertaining to the office of directors of banking associations and all such duties as are prescribed by law.

Said board shall administer the affairs of said

bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks.

Such board of directors shall be selected as hereinafter specified and shall consist of nine members, holding office for three years, and divided into three classes, designated as classes A, B, and C.

Constitution
of board of
directors.

Class A shall consist of three members, who shall be chosen by and be representative of the stock-holding banks.

Class B shall consist of three members, who at the time of their election shall be actively engaged in their district in commerce, agriculture or some other industrial pursuit.

Class C shall consist of three members who shall be designated by the Federal Reserve Board. When the necessary subscriptions to the capital stock have been obtained for the organization of any Federal reserve bank, the Federal Reserve Board shall appoint the class C directors and shall designate one of such directors as chairman of the board to be selected. Pending the designation of such chairman, the organization committee shall exercise the powers and duties appertaining to the office of chairman in the organization of such Federal reserve bank.

No Senator or Representative in Congress shall be a member of the Federal Reserve Board or an officer or a director of a Federal reserve bank.

No director of class B shall be an officer, director, or employee of any bank.

No director of class C shall be an officer, director, employee, or stockholder of any bank.

Directors of class A and class B shall be chosen in the following manner:

Method of
choosing direc-
tors of class A
and class B.

The federal reserve board shall classify the member banks of the district into three general groups or divisions, designating each group by number. Each group shall consist as nearly as may be of banks of similar capitalization. Each member bank shall be permitted to nominate to the chairman of the board of directors of the Federal reserve bank of the district one candidate for director of Class A and one candidate for director of Class B. The candidates so nominated shall be listed by the chairman, indicating by whom nominated, and a copy of said list shall, within fifteen days after its completion, be furnished by the chairman to each member bank. Each member bank by a resolution of the board or by an amendment to its by-laws shall authorize its president, cashier, or some other officer to cast the vote of the member bank in the elections of Class A and Class B directors.

Within fifteen days after receipt of the list of candidates the duly authorized officer of a member bank shall certify to the chairman his first, second, and other choices for director of Class A and Class B, respectively, upon a preferential ballot upon a form furnished by the chairman of the board of directors of the Federal reserve bank of the district. Each such officer shall make a cross opposite the name of the first, second, and other choices for a director of Class A and for a director of Class B, but shall not vote more than one choice for any one candidate. No officer or director of a member bank shall be eligible to serve as a Class A director unless nominated and elected by banks which are

members of the same group as the member bank of which he is an officer or director.

Any person who is an officer or director of more than one member bank shall not be eligible for nomination as a Class A director except by banks in the same group as the bank having the largest aggregate resources of any of those of which such person is an officer or director.

Any candidate having a majority of all votes cast in the column of first choice shall be declared elected. If no candidate have a majority of all the votes in the first column, then there shall be added together the votes cast by the electors for such candidates in the second column and the votes cast for the several candidates in the first column. If any candidate then have a majority of the electors voting, by adding together the first and second choices, he shall be declared elected. If no candidate have a majority of electors voting when the first and second choices shall have been added, then the votes cast in the third column for other choices shall be added together in like manner, and the candidate then having the highest number of votes shall be declared elected. An immediate report of election shall be declared.

Class C directors shall be appointed by the Federal Reserve Board. They shall have been for at least two years residents of the district for which they are appointed, one of whom shall be designated by said board as chairman of the board of directors of the Federal reserve bank and as "Federal reserve agent." He shall be a person of tested banking experience, and in addition to his duties as chairman of the board of directors of the Federal reserve bank he shall be required to maintain, under regulations to be established by the Federal Reserve Board, a local office of said board on the premises of the

Appointment
of class C di-
rectors.

Federal re-
serve agent.

Federal reserve bank. He shall make regular reports to the Federal Reserve Board and shall act as its official representative for the performance of the functions conferred upon it by this act. He shall receive an annual compensation to be fixed by the Federal Reserve Board and paid monthly by the Federal reserve bank to which he is designated. One of the directors of class C shall be appointed by the Federal Reserve Board as deputy chairman to exercise the powers of the chairman of the board when necessary. In case of the absence of the chairman and deputy chairman, the third-class C director shall preside at meetings of the board.

Assistants to
federal reserve
agent.

Subject to the approval of the Federal Reserve Board, the Federal reserve agent shall appoint one or more assistants. Such assistants, who shall be persons of tested banking experience, shall assist the Federal reserve agent in the performance of his duties and shall also have power to act in his name and stead during his absence or disability. The Federal Reserve Board shall require such bonds of the assistant Federal reserve agents as it may deem necessary for the protection of the United States. Assistants to the Federal reserve agent shall receive an annual compensation, to be fixed and paid in the same manner as that of the Federal reserve agent.

Compensa-
tion of direc-
tors.

Directors of Federal reserve banks shall receive, in addition to any compensation otherwise provided, a reasonable allowance for necessary expenses in attending meetings of their respective boards, which amount shall be paid by the respective Federal reserve banks. Any compensation that may be provided by boards of directors of Federal reserve banks for directors, officers or employees shall be subject to the approval of the Federal Reserve Board.

The Reserve Bank Organization Committee may, in organizing Federal reserve banks, call

such meetings of bank directors in the several districts as may be necessary to carry out the purposes of this Act, and may exercise the functions herein conferred upon the chairman of the board of directors of each Federal reserve bank pending the complete organization of such bank.

At the first meeting of the full board of directors of each Federal reserve bank, it shall be the duty of the directors of classes A, B, and C, respectively, to designate one of the members of each class whose term of office shall expire in one year from the first of January nearest to date of such meeting, one whose term of office shall expire at the end of two years from said date, and one whose term of office shall expire at the end of three years from said date. Thereafter every director of a Federal reserve bank chosen as hereinbefore provided shall hold office for a term of three years. Vacancies that may occur in the several classes of directors of Federal reserve banks may be filled in the manner provided for the original selection of such directors, such appointees to hold office for the unexpired terms of their predecessors.

Terms of office of directors.

STOCK ISSUES; INCREASE AND DECREASE OF CAPITAL

SEC. 5. The capital stock of each Federal reserve bank shall be divided into shares of \$100 each. The outstanding capital stock shall be increased from time to time as member banks increase their capital stock and surplus or as additional banks become members, and may be decreased as member banks reduce their capital stock or surplus or cease to be members. Shares of the capital stock of Federal reserve banks owned by member banks shall not be transferred. If a member bank ceases its capital stock or surplus, it shall thereupon subscribe for an additional amount of capital stock of the Federal reserve bank of its district equal to six per centum of the said increase, one-half of said subscription to be

paid in the manner hereinbefore provided for original subscription, and one-half subject to call of the Federal Reserve Board. A bank applying for stock in a Federal reserve bank at any time after the organization thereof must subscribe for an amount of the capital stock of the Federal reserve bank equal to six per centum of the paid-up capital stock and surplus of said applicant bank, paying therefor its par value plus one-half of one per centum a month from the period of the last dividend. When the capital stock of any Federal reserve bank shall have been increased either on account of the increase of capital stock of member banks or on account of the increase in the number of member banks, the board of directors shall cause to be executed a certificate to the Comptroller of the Currency showing the increase in capital stock, the amount paid in, and by whom paid. When a member bank reduces its capital stock it shall surrender a proportionate amount of its holdings in the capital of said Federal reserve bank, and when a member bank voluntarily liquidates it shall surrender all of its holdings of the capital stock of said Federal reserve bank and be released from its stock subscription not previously called. In either case the shares surrendered shall be canceled and the member bank shall receive in payment therefor, under regulations to be prescribed by the Federal Reserve Board, a sum equal to its cash-paid subscriptions on the shares surrendered and one-half of one per centum a month from the period of the last dividend, not to exceed the book value thereof, less any liability of such member bank to the Federal reserve bank.

Stock adjustments in case a member bank becomes insolvent.

SEC. 6. If any member bank shall be declared insolvent and a receiver appointed therefor, the stock held by it in said Federal reserve bank shall be canceled, without impairment of

its liability, and all cash-paid subscriptions on said stock, with one-half of one per centum per month from the period of last dividend, not to exceed the book value thereof, shall be first applied to all debts of the insolvent member bank to the Federal reserve bank, and the balance, if any, shall be paid to the receiver of the insolvent bank. Whenever the capital stock of a Federal reserve bank is reduced, either on account of a reduction in capital stock of any member bank or of the liquidation or insolvency of such bank, the board of directors shall cause to be executed a certificate to the Comptroller of the Currency showing such reduction of capital stock and the amount repaid to such bank.

DIVISION OF EARNINGS

SEC. 7. After all necessary expenses of a Federal reserve bank have been paid or provided for, the stockholders shall be entitled to receive an annual dividend of six per centum on the paid-in capital stock, which dividend shall be cumulative. After the aforesaid dividend claims have been fully met, the net earnings shall be paid to the United States as a franchise tax except that the whole of such net earnings, including those for the year ending December thirty-first, nineteen hundred and eighteen, shall be paid into a surplus fund until it shall amount to one hundred per centum of the subscribed capital stock of such bank, and that thereafter ten per centum of such net earnings shall be paid into the surplus.

Dividends
and surplus.

The net earnings derived by the United States from Federal reserve banks shall, in the discretion of the Secretary, be used to supplement the gold reserve held against outstanding United States notes, or shall be applied to the reduction of the outstanding bonded indebtedness of the United States under regulations to

Disposition
of net earnings
accruing
to U. S. Government.

be prescribed by the Secretary of the Treasury. Should a Federal reserve bank be dissolved or go into liquidation, any surplus remaining, after the payment of all debts, dividend requirements as hereinbefore provided, and the par value of the stock, shall be paid to and become the property of the United States and shall be similarly applied.

Tax exemp-
tion.

Federal reserve banks, including the capital stock and surplus therein, and the income derived therefrom shall be exempt from Federal, State, and local taxation, except taxes upon real estate.

SEC. 8. Section fifty-one hundred and fifty-four, United States Revised Statutes, is hereby amended to read as follows:

State banks
may be con-
verted into na-
tional banks.

Any bank incorporated by special law of any State or of the United States or organized under the general laws of any State or of the United States and having an unimpaired capital sufficient to entitle it to become a national banking association under the provisions of the existing laws may, by the vote of the shareholders owning not less than fifty-one per centum of the capital stock of such bank or banking association, with the approval of the Comptroller of the Currency be converted into a national banking association, with any name approved by the Comptroller of the Currency:

Provided, however, That said conversion shall not be in contravention of the State law. In such case the articles of association and organization certificate may be executed by a majority of the directors of the bank or banking institution, and the certificate shall declare that the owners of fifty-one per centum of the capital stock have authorized the directors to make such certificate and to change or convert the bank or banking institution into a national as-

APPENDIX B

sociation. A majority of the directors, after executing the articles of association and the organization certificate, shall have power to execute all other papers and to do whatever may be required to make its organization perfect and complete as a national association. The shares of any such bank may continue to be for the same amount each as they were before the conversion, and the directors may continue to be directors of the association until others are elected or appointed in accordance with the provisions of the statutes of the United States. When the Comptroller has given to such bank or banking association a certificate that the provisions of this Act have been complied with, such bank or banking association, and all its stockholders, officers, and employees, shall have the same powers and privileges, and shall be subject to the same duties, liabilities, and regulations, in all respects, as shall have been prescribed by the Federal Reserve Act and by the national banking Act for associations originally organized as national banking associations.

STATE BANKS AS MEMBERS

SEC. 9.¹ Any bank incorporated by special law of any State, or organized under the general laws of any State or of the United States, desiring to become a member of the Federal Reserve System, may make application to the Federal Reserve Board, under such rules and regulations as it may prescribe, for the right to subscribe to the stock of the Federal reserve bank organized within the district in which the applying bank is located. Such application shall be for the same amount of stock that the applying bank would be required to subscribe to as a national bank. The Federal Reserve Board, subject to such conditions as it may prescribe,

¹ As amended by act approved June 21, 1917 (40 Stat., chap. 32).

may permit the applying bank to become a stockholder of such Federal reserve bank.

In acting upon such applications the Federal Reserve Board shall consider the financial condition of the applying bank, the general character of its management, and whether or not the corporate powers exercised are consistent with the purposes of this act.

Qualifications
necessary for
membership.

Whenever the Federal Reserve Board shall permit the applying bank to become a stockholder in the Federal reserve bank of the district its stock subscription shall be payable on call of the Federal Reserve Board, and stock issued to it shall be held subject to the provisions of this act.

All banks admitted to membership under authority of this section shall be required to comply with the reserve and capital requirements of this act and to conform to those provisions of law imposed on national banks which prohibit such banks from lending on or purchasing their own stock, which relate to the withdrawal or impairment of their capital stock, and which relate to the payment of unearned dividends. Such banks and the officers, agents, and employees thereof shall also be subject to the provisions of and to the penalties prescribed by section fifty-two hundred and nine of the Revised Statutes, and shall be required to make reports of condition and of the payment of dividends to the Federal reserve bank of which they become a member. Not less than three of such reports shall be made annually on call of the Federal reserve bank on dates to be fixed by the Federal Reserve Board. Failure to make such reports within ten days after the date they are called for shall subject the offending bank to a penalty of \$100 a day for each day that it fails to transmit such report; such penalty to be

collected by the Federal reserve bank by suit or otherwise.

As a condition of membership such banks shall likewise be subject to examinations made by direction of the Federal Reserve Board or of the Federal reserve bank by examiners selected or approved by the Federal Reserve Board.

Examination
of state banks.

Whenever the directors of the Federal reserve bank shall approve the examinations made by the State authorities, such examinations and the reports thereof may be accepted in lieu of examinations made by examiners selected or approved by the Federal Reserve Board: *Provided, however,* That when it deems it necessary the board may order special examinations by examiners of its own selection and shall in all cases approve the form of the report. The expenses of all examinations, other than those made by State authorities, shall be assessed against and paid by the banks examined.

If at any time it shall appear to the Federal Reserve Board that a member bank has failed to comply with the provisions of this section or the regulations of the Federal Reserve Board made pursuant thereto, it shall be within the power of the board after hearing to require such bank to surrender its stock in the Federal reserve bank and to forfeit all rights and privileges of membership. The Federal Reserve Board may restore membership upon due proof of compliance with the conditions imposed by this section.

Any State bank or trust company desiring to withdraw from membership in a Federal reserve bank may do so, after six months' written notice shall have been filed with the Federal Reserve Board, upon the surrender and cancellation of all of its holdings of capital stock in the Federal reserve bank: *Provided, however,* That no Federal reserve bank shall, except under ex-

Withdrawal
from member-
ship.

press authority of the Federal Reserve Board, cancel within the same calendar year more than twenty-five per centum of its capital stock for the purpose of effecting voluntary withdrawals during that year. All such applications shall be dealt with in the order in which they are filed with the board. Whenever a member bank shall surrender its stock holdings in a Federal reserve bank, or shall be ordered to do so by the Federal Reserve Board, under authority of law, all of its rights and privileges as a member bank shall thereupon cease and determine, and after due provision has been made for any indebtedness due or to become due to the Federal reserve bank it shall be entitled to a refund of its cash paid subscription with interest at the rate of one-half of one per centum per month from date of last dividend, if earned, the amount refunded in no event to exceed the book value of the stock at that time, and shall likewise be entitled to repayment of deposits and of any other balance due from the Federal reserve bank.

No applying bank shall be admitted to membership in a Federal reserve bank unless it possesses a paid-up, unimpaired capital sufficient to entitle it to become a national banking association in the place where it is situated under the provisions of the national-bank act.

Privileges
and restric-
tions applying
to state banks
which become
members.

Banks becoming members of the Federal Reserve System under authority of this section shall be subject to the provisions of this section and to those of this act which relate specifically to member banks, but shall not be subject to examination under the provisions of the first two paragraphs of section fifty-two hundred and forty of the Revised Statutes as amended by section twenty-one of this act.¹ Subject to the provisions of this act and to the regulations of the board made pursuant thereto, any bank becoming a member of the Federal Reserve Sys-

¹ Amending section 21 of this act.

APPENDIX B

tem shall retain its full charter and statutory rights as a State bank or trust company, and may continue to exercise all corporate powers granted it by the State in which it was created, and shall be entitled to all privileges of member banks: *Provided, however,* That no Federal reserve bank shall be permitted to discount for any State bank or trust company notes, drafts, or bills of exchange of any one borrower who is liable for borrowed money to such State bank or trust company in an amount greater than ten per centum of the capital and surplus of such State bank or trust company, but the discount of bills of exchange drawn against actually existing value and the discount of commercial or business paper actually owned by the person negotiating the same shall not be considered as borrowed money within the meaning of this section. The Federal reserve bank, as a condition of the discount of notes, drafts, and bills of exchange for such State bank or trust company, shall require a certificate or guaranty to the effect that the borrower is not liable to such bank in excess of the amount provided by this section, and will not be permitted to become liable in excess of this amount while such notes, drafts, or bills of exchange are under discount with the Federal reserve bank.

It shall be unlawful for any officer, clerk, or agent of any bank admitted to membership under authority of this section to certify any check drawn upon such bank unless the person or company drawing the check has on deposit therewith at the time such check is certified an amount of money equal to the amount specified in such check. Any check so certified by duly authorized officers shall be a good and valid obligation against such bank, but the act of any such officer, clerk, or agent in violation of this section may subject such bank to a forfeiture of

its membership in the Federal Reserve System upon hearing by the Federal Reserve Board.

FEDERAL RESERVE BOARD

Constitution
of board, term
of office and
compensation
of members.

SEC. 10. A Federal Reserve Board is hereby created which shall consist of seven members, including the Secretary of the Treasury and the Comptroller of the Currency, who shall be members ex officio, and five members appointed by the President of the United States, by and with the advice and consent of the Senate. In selecting the five appointive members of the Federal Reserve Board, not more than one of whom shall be selected from any one Federal reserve district, the President shall have due regard to a fair representation of the different commercial, industrial and geographical divisions of the country. The five members of the Federal Reserve Board appointed by the President and confirmed as aforesaid shall devote their entire time to the business of the Federal Reserve Board and shall each receive an annual salary of \$12,000, payable monthly together with actual necessary traveling expenses, and the Comptroller of the Currency, as ex officio member of the Federal Reserve Board, shall, in addition to the salary now paid him as Comptroller of the Currency, receive the sum of \$7,000 annually for his services as a member of said board.

The Secretary of the Treasury and the Comptroller of the Currency shall be ineligible during the time they are in office and for two years thereafter to hold any office, position, or employment in any member bank. The appointive members of the Federal Reserve Board shall be eligible during the time they are in office and for two years thereafter to hold any office, position, or employment in any member bank, except that this restriction shall not apply to a member who has served the full term for which he was ap-

pointed. Of the five members thus appointed by the President at least two shall be persons experienced in banking or finance. One shall be designated by the President to serve for two, one for four, one for six, one for eight, and one for ten years, and thereafter each member so appointed shall serve for a term of ten years unless sooner removed for cause by the President. Of the five persons thus appointed, one shall be designated by the President as governor and one as vice governor of the Federal Reserve Board. The governor of the Federal Reserve Board, subject to its supervision, shall be the active executive officer. The Secretary of the Treasury may assign offices in the Department of the Treasury for the use of the Federal Reserve Board. Each member of the Federal Reserve Board shall within fifteen days after notice of appointment make and subscribe to the oath of office.

The Federal Reserve Board shall have power to levy semiannually upon the Federal reserve banks, in proportion to their capital stock and surplus, an assessment sufficient to pay its estimated expenses and the salaries of its members and employees for the half year succeeding the levying of such assessment, together with any deficit carried forward from the preceding half year.

The first meeting of the Federal Reserve Board shall be held in Washington, District of Columbia, as soon as may be after the passage of this Act, at a date to be fixed by the Reserve Bank Organization Committee. The Secretary of the Treasury shall be ex-officio chairman of the Federal Reserve Board. No member of the Federal Reserve Board shall be an officer or director of any bank, banking institution, trust company, or Federal reserve bank nor hold stock in any bank, banking institution, or trust company; and before entering upon his duties

Federal reserve banks to be assessed for expenses of board.

Restrictions on members of board.

Vacancies.

as a member of the Federal Reserve Board he shall certify under oath to the Secretary of the Treasury that he has complied with this requirement. Whenever a vacancy shall occur, other than by expiration of term, among the five members of the Federal Reserve Board appointed by the President, as above provided, a successor shall be appointed by the President, with the advice and consent of the Senate, to fill such vacancy, and when appointed he shall hold office for the unexpired term of the member whose place he is selected to fill.

The President shall have power to fill all vacancies that may happen on the Federal Reserve Board during the recess of the Senate, by granting commissions which shall expire thirty days after the next session of the Senate convenes.

Nothing in this Act contained shall be construed as taking away any powers heretofore vested by law in the Secretary of the Treasury which relate to the supervision, management, and control of the Treasury Department and bureaus under such department, and wherever any power vested by this Act in the Federal Reserve Board or the Federal reserve agent appears to conflict with the powers of the Secretary of the Treasury, such powers shall be exercised subject to the supervision and control of the Secretary.

Annual report.

The Federal Reserve Board shall annually make a full report of its operations to the Speaker of the House of Representatives, who shall cause the same to be printed for the information of the Congress.

Comptroller of the Currency.

Section three hundred and twenty-four of the Revised Statutes of the United States shall be amended so as to read as follows: There shall be in the Department of the Treasury a bureau

charged with the execution of all laws passed by Congress relating to the issue and regulation of national currency secured by United States bonds and under the general supervision of the Federal Reserve Board, of all Federal reserve notes, the chief officer of which bureau shall be called the Comptroller of the Currency and shall perform his duties under the general directions of the Secretary of the Treasury.

SEC. 11.¹ The Federal Reserve Board shall be authorized and empowered:

(a) To examine at its discretion the accounts, books and affairs of each Federal reserve bank and of each member bank and to require such statements and reports as it may deem necessary. The said board shall publish once each week a statement showing the condition of each Federal reserve bank and a consolidated statement for all Federal reserve banks. Such statements shall show in detail the assets and liabilities of the Federal reserve banks, single and combined, and shall furnish full information regarding the character of the money held as reserve and the amount, nature and maturities of the paper and other investments owned or held by Federal reserve banks.

Powers of
Federal Re-
serve Board.

To supervise
Federal re-
serve banks.

(b) To permit, or, on the affirmative vote of at least five members of the Reserve Board to require Federal reserve banks to rediscount the discounted paper of other Federal reserve banks at rates of interest to be fixed by the Federal Reserve Board.

To compel
one Federal re-
serve bank to
rediscount for
another.

(c) To suspend for a period not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen days, any reserve requirements specified in this

To suspend
reserve re-
quirements.

¹ As amended by act approved Sept. 7, 1916 (39 Stat., 752, chap. 461).

Act: *Provided*, That it shall establish a graduated tax upon the amounts by which the reserve requirements of this Act may be permitted to fall below the level hereinafter specified: *And provided further*, That when the gold reserve held against Federal reserve notes falls below forty per centum, the Federal Reserve Board shall establish a graduated tax of not more than one per centum per annum upon such deficiency until the reserves fall to thirty-two and one-half per centum, and when said reserve falls below thirty-two and one-half per centum, a tax at the rate increasingly of not less than one and one-half per centum per annum upon each two and one-half per centum or fraction thereof that such reserve falls below thirty-two and one-half per centum. The tax shall be paid by the reserve bank, but the reserve bank shall add an amount equal to said tax to the rates of interest and discount fixed by the Federal Reserve Board.

To supervise
issue of Fed-
eral reserve
notes.

(d) To supervise and regulate through the bureau under the charge of the Comptroller of the Currency the issue and retirement of Federal reserve notes, and to prescribe rules and regulations under which such notes may be delivered by the Comptroller to the Federal reserve agents applying therefor.

To reclassify
cities as re-
gards reserve
requirements.

(e) To add to the number of cities classified as reserve and central reserve cities under existing law in which national banking associations are subject to the reserve requirements set forth in section twenty of this Act; or to reclassify existing reserve and central reserve cities or to terminate their designation as such.

(f) To suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in writing by the Federal Reserve Board to the removed officer or director and to said bank.

(g) To require the writing off of doubtful or worthless assets upon the books and balance sheets of Federal reserve banks.

(h) To suspend, for the violation of any of the provisions of this Act, the operations of any Federal reserve bank, to take possession thereof, administer the same during the period of suspension, and, when deemed advisable, to liquidate or reorganize such bank.

Miscellaneous powers.

(i) To require bonds of Federal reserve agents, to make regulations for the safeguarding of all collateral, bonds, Federal reserve notes, money or property of any kind deposited in the hands of such agents, and said board shall perform the duties, functions, or services specified in this Act, and make all rules and regulations necessary to enable said board effectively to perform the same.

(j) To exercise general supervision over said Federal reserve banks.

(k) To grant by special permit to national banks applying therefor, when not in contravention of State or local law, the right to act as trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, committee of estates of lunatics, or in any other fiduciary capacity in which State banks, trust companies, or other corporations which come into competition with national banks are permitted to act under the laws of the State in which the national bank is located.

Power of Federal Reserve Board to authorize national banks to exercise certain trust company functions.

Whenever the laws of such State authorize or permit the exercise of any or all of the foregoing powers by State banks, trust companies, or other corporations which compete with national banks, the granting to and the exercise of such powers by national banks shall not be deemed to be in contravention of State or local law within the meaning of this Act.

National banks exercising any or all of the

APPENDIX B

powers enumerated in this subsection shall segregate all assets held in any fiduciary capacity from the general assets of the bank and shall keep a separate set of books and records showing in proper detail all transactions engaged in under authority of this subsection. Such books and records shall be open to inspection by the State authorities to the same extent as the books and records of corporations organized under State law which exercise fiduciary powers, but nothing in this Act shall be construed as authorizing the State authorities to examine the books, records, and assets of the national bank which are not held in trust under authority of this subsection.

No national bank shall receive in its trust department deposits of current funds subject to check or the deposit of checks, drafts, bills of exchange, or other items for collection or exchange purposes. Funds deposited or held in trust by the bank awaiting investment shall be carried in a separate account and shall not be used by the bank in the conduct of its business unless it shall first set aside in the trust department United States bonds or other securities approved by the Federal Reserve Board.

In the event of the failure of such bank the owners of the funds held in trust for investment shall have a lien on the bonds or other securities so set apart in addition to their claim against the estate of the bank.

Whenever the laws of a State require corporations acting in a fiduciary capacity, to deposit securities with the State authorities for the protection of private or court trusts, national banks so acting shall be required to make similar deposits and securities so deposited shall be held for the protection of private or court trusts, as provided by the State law.

National banks in such cases shall not be required to execute the bond usually required of

APPENDIX B

individuals if State corporations under similar circumstances are exempt from this requirement.

National banks shall have power to execute such bond when so required by the laws of the State.

In any case in which the laws of a State require that a corporation acting as trustee, executor, administrator, or in any capacity specified in this section, shall take an oath or make an affidavit, the president, vice president, cashier, or trust officer of such national bank may take the necessary oath or execute the necessary affidavit.

It shall be unlawful for any national banking association to lend any officer, director, or employee any funds held in trust under the powers conferred by this section. Any officer, director, or employee making such loan, or to whom such loan is made, may be fined not more than \$5,000, or imprisoned not more than five years, or may be both fined and imprisoned, in the discretion of the court.

In passing upon applications for permission to exercise the powers enumerated in this subsection, the Federal Reserve Board may take into consideration the amount of capital and surplus of the applying bank, whether or not such capital and surplus is sufficient under the circumstances of the case, the needs of the community to be served, and any other facts and circumstances that seem to it proper, and may grant or refuse the application accordingly: *Provided*, That no permit shall be issued to any national banking association having a capital and surplus less than the capital and surplus required by State law of State banks, trust companies, and corporations exercising such powers.

(1) To employ such attorneys, experts, assistants, clerks, or other employees as may be deemed necessary to conduct the business of the

board. All salaries and fees shall be fixed in advance by said board and shall be paid in the same manner as the salaries of the members of said board. All such attorneys, experts, assistants, clerks, and other employees shall be appointed without regard to the provisions of the Act of January sixteenth, eighteen hundred and eighty-three (volume twenty-two, United States Statutes at Large, page four hundred and three), and amendments thereto, or any rule or regulation made in pursuance thereof: *Provided*, That nothing herein shall prevent the President from placing said employees in the classified service.

(m) Upon the affirmative vote of not less than five of its members, the Federal Reserve Board shall have power to permit Federal Reserve banks to discount for any member bank notes, drafts, or bills of exchange bearing the signature or endorsement of any one borrower in excess of the amount permitted by section nine and section thirteen of this Act, but in no case to exceed twenty per centum of the member bank's capital and surplus: *Provided, however*, That all such notes, drafts, or bills of exchange discounted for any member bank in excess of the amount permitted under such sections shall be secured by not less than a like face amount of bonds or notes of the United States issued since April twenty-fourth, nineteen hundred and seventeen, or certificates of indebtedness of the United States: *Provided* further, That the provisions of this subsection (m) shall not be operative after December 31st, 1920.

How consti-
tuted.

FEDERAL ADVISORY COUNCIL

SEC. 12. There is hereby created a Federal Advisory Council, which shall consist of as many members as there are Federal reserve districts. Each Federal reserve bank by its board of directors shall annually select from its own

APPENDIX B

1

Federal reserve district one member of said council, who shall receive such compensation and allowances as may be fixed by his board of directors subject to the approval of the Federal Reserve Board. The meetings of said advisory council shall be held at Washington, District of Columbia, at least four times each year, and oftener if called by the Federal Reserve Board. The council may in addition to the meetings above provided for hold such other meetings in Washington, District of Columbia, or elsewhere, as it may deem necessary, may select its own officers and adopt its own methods of procedure, and a majority of its members shall constitute a quorum for the transaction of business. Vacancies in the council shall be filled by the respective reserve banks, and members selected to fill vacancies, shall serve for the unexpired term.

The Federal Advisory Council shall have power, by itself or through its officers, (1) to confer directly with the Federal Reserve Board on general business conditions; (2) to make oral or written representations concerning matters within the jurisdiction of said board; (3) to call for information and to make recommendations in regard to discount rates, rediscount business, note issues, reserve conditions in the various districts, the purchase and sale of gold or securities by reserve banks, open-market operations by said banks, and the general affairs of the reserve banking system.

Powers.

POWERS OF FEDERAL RESERVE BANKS

SEC. 13.¹ Any Federal reserve bank may receive from any of its member banks, and from the United States, deposits of current funds in

Deposit.

¹ As amended by act approved Mar. 3, 1915 (38 Stat., 958 chap. 93); act approved Sept. 7, 1916 (39 Stat., 752, chap. 461); act approved June 21, 1917 (40 Stat., chap. 32).

lawful money, national-bank notes, Federal reserve notes, or checks, and drafts, payable upon presentation, and also, for collection, maturing notes and bills; or, solely for purposes of exchange or of collection, may receive from other Federal reserve banks deposits of current funds in lawful money, national-bank notes, or checks upon other Federal reserve banks, and checks and drafts, payable upon presentation within its district, and maturing notes and bills payable within its district; or, solely for the purposes of exchange or of collection, may receive from any nonmember bank or trust company deposits of current funds in lawful money, national-bank notes, Federal reserve notes, checks and drafts payable upon presentation, or maturing notes and bills: *Provided*, Such nonmember bank or trust company maintains with the Federal reserve bank of its district a balance sufficient to offset the items in transit held for its account by the Federal reserve bank: *Provided further*, That nothing in this or any other section of this Act shall be construed as prohibiting a member or nonmember bank from making reasonable charges, to be determined and regulated by the Federal Reserve Board, but in no case to exceed 10 cents per \$100 or fraction thereof, based on the total of checks and drafts presented at any one time, for collection or payment of checks and drafts and remission therefor by exchange or otherwise; but no such charges shall be made against the Federal reserve banks.

Rediscount.

Upon the indorsement of any of its member banks, which shall be deemed a waiver of demand, notice and protest by such bank as to its own indorsement exclusively, any Federal reserve bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the pro-

APPENDIX B

ceeds of which have been used, or are to be used, for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this Act. Nothing in this Act contained shall be construed to prohibit such notes, drafts, and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States. Notes, drafts, and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days, exclusive of days of grace: *Provided*, That notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months, exclusive of days of grace, may be discounted in an amount to be limited to a percentage of the assets of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board.

The aggregate of such notes, drafts, and bills bearing the signature or indorsement of any one borrower, whether a person, company, firm, or corporation, rediscounted for any one bank shall at no time exceed ten per centum of the unimpaired capital and surplus of said bank; but this restriction shall not apply to the discount of bills of exchange drawn in good faith against actually existing values.

Any Federal reserve bank may discount acceptances of the kinds hereinafter described, which have a maturity at the time of discount of not more than three months' sight, exclusive

of days of grace, and which are indorsed by at least one member bank.

Member banks may accept foreign and domestic bills.

Any member bank may accept drafts or bills of exchange drawn upon it having not more than six months' sight to run, exclusive of days of grace, which grow out of transactions involving the importation or exportation of goods; or which grow out of transactions involving the domestic shipment of goods provided shipping documents conveying or securing title are attached at the time of acceptance; or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples. No member bank shall accept, whether in a foreign or domestic transaction, for any one person, company, firm, or corporation, to an amount equal at any time in the aggregate to more than ten per centum of its paid-up and unimpaired capital stock and surplus, unless the bank is secured either by attached documents or by some other actual security growing out of the same transaction as the acceptance; and no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half of its paid-up and unimpaired capital stock and surplus: *Provided, however,* That the Federal Reserve Board, under such general regulations as it may prescribe, which shall apply to all banks alike regardless of the amount of capital stock and surplus, may authorize any member bank to accept such bills to an amount not exceeding at any time in the aggregate one hundred per centum of its paid-up and unimpaired capital stock and surplus: *Provided, further,* That the aggregate of acceptances growing out of domestic transactions shall in no event exceed fifty per centum of such capital stock and surplus.

Federal reserve banks may loan on short-time collateral notes.

Any Federal reserve bank may make advances to its member banks on their promissory notes

for a period not exceeding fifteen days at rates to be established by such Federal reserve banks, subject to the review and determination of the Federal Reserve Board, provided such promissory notes are secured by such notes, drafts, bills of exchange, or bankers' acceptances as are eligible for rediscount or for purchase by Federal reserve banks under the provisions of this Act, or by the deposit or pledge of bonds or notes of the United States.

Section fifty-two hundred and two of the Revised Statutes of the United States is hereby amended so as to read as follows: "No national banking association shall at any time be indebted, or in any way liable, to an amount exceeding the amount of its capital stock at such time actually paid in and remaining undiminished by losses or otherwise, except on account of demands of the nature following:

Limitations
on indebted-
ness of nation-
al banks.

First. Notes of circulation.

Second. Moneys deposited with or collected by the association.

Third. Bills of exchange or drafts drawn against money actually on deposit to the credit of the association, or due thereto.

Fourth. Liabilities to the stockholders of the association for dividends and reserve profits.

Fifth. Liabilities incurred under the provisions of the Federal reserve Act.

The discount and rediscount and the purchase and sale by any Federal reserve bank of any bills receivable and of domestic and foreign bills of exchange, and of acceptances authorized by this Act, shall be subject to such restrictions, limitations, and regulations as may be imposed by the Federal Reserve Board.

That in addition to the powers now vested by law in national banking associations organized under the laws of the United States any such association located and doing business in any place the population of which does not exceed

Additional
powers given
to national
banks.

five thousand inhabitants, as shown by the last preceding decennial census, may, under such rules and regulations as may be prescribed by the Comptroller of the Currency, act as the agent for any fire, life, or other insurance company authorized by the authorities of the State in which said bank is located to do business in said State, by soliciting and selling insurance and collecting premiums on policies issued by such company; and may receive for services so rendered such fees or commissions as may be agreed upon between the said association and the insurance company for which it may act as agent; and may also act as the broker or agent for others in making or procuring loans on real estate located within one hundred miles of the place in which said bank may be located, receiving for such services a reasonable fee or commission: *Provided, however,* That no such bank shall in any case guarantee either the principal or interest of any such loans or assume or guarantee the payment of any premium on insurance policies issued through its agency by its principal: *And provided further,* That the bank shall not guarantee the truth of any statement made by an assured in filing his application for insurance.

Acceptances
by member
banks author-
ized of bills
drawn from
places outside
of country.

Any member bank may accept drafts or bills of exchange drawn upon it having not more than three months' sight to run, exclusive of days of grace, drawn under regulations to be prescribed by the Federal Reserve Board by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange as required by the usages of trade in the respective countries, dependencies, or insular possessions. Such drafts or bills may be acquired by Federal reserve banks in such amounts and subject to such regulations, restrictions, and limitations

as may be prescribed by the Federal Reserve Board: *Provided, however,* That no member bank shall accept such drafts or bills of exchange referred to this paragraph for any one bank to an amount exceeding in the aggregate ten per centum of the paid-up and unimpaired capital and surplus of the accepting bank unless the draft or bill of exchange is accompanied by documents conveying or securing title or by some other adequate security: *Provided further,* That no member bank shall accept such drafts or bills in an amount exceeding at any time the aggregate of one-half of its paid-up and unimpaired capital and surplus.

OPEN-MARKET OPERATIONS

SEC. 14.¹ Any Federal reserve bank may, under rules and regulations prescribed by the Federal Reserve Board, purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities by this Act made eligible for rediscount, with or without the indorsement of a member bank.

Commercial
paper and ca-
ble transfers.

Every Federal reserve bank shall have power:

(a) To deal in gold coin and bullion at home or abroad, to make loans thereon, exchange Federal reserve notes for gold, gold coin, or gold certificates, and to contract for loans of gold coin or bullion, giving therefor, when necessary, acceptable security, including the hypothecation of United States bonds or other securities which Federal reserve banks are authorized to hold;

Gold coin
and bullion.

(b) To buy and sell, at home or abroad, bonds and notes of the United States, and bills, notes, revenue bonds, and warrants with a maturity

Government
securities.

¹ As amended by act approved Sept. 7, 1916 (39 Stat., 752, chap. 461); act approved June 21, 1917 (40 Stat., chap. 32).

from date of purchase of not exceeding six months, issued in anticipation of the collection of taxes or in anticipation of the receipt of assured revenues by any State, county, district, political subdivision, or municipality in the continental United States, including irrigation, drainage, and reclamation districts, such purchases to be made in accordance with rules and regulations prescribed by the Federal Reserve Board;

Bills of ex-
change.

(c) To purchase from member banks and to sell, with or without its indorsement, bills of exchange arising out of commercial transactions, as hereinbefore defined;

Discount
rates.

(d) To establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business;

Foreign
agencies and
correspon-
dents.

(e) To establish accounts with other Federal reserve banks for exchange purposes and, with the consent or upon the order and direction of the Federal Reserve Board and under regulations to be prescribed by said board, to open and maintain accounts in foreign countries, appoint correspondents, and establish agencies in such countries wheresoever it may be deemed best for the purpose of purchasing, selling, and collecting bills of exchange, and to buy and sell, with or without its indorsement, through such correspondents or agencies, bills of exchange (or acceptances) arising out of actual commercial transactions which have not more than ninety days to run, exclusive of days of grace, and which bear the signature of two or more responsible parties, and, with the consent of the Federal Reserve Board, to open and maintain banking accounts for such foreign correspond-

APPENDIX B

ents or agencies. Whenever any such account has been opened or agency or correspondent has been appointed by a Federal reserve bank, with the consent of or under the order and direction of the Federal Reserve Board, any other Federal reserve bank may, with the consent and approval of the Federal Reserve Board, be permitted to carry on or conduct, through the Federal reserve bank opening such account or appointing such agency or correspondent, any transaction authorized by this section under rules and regulations to be prescribed by the board.

GOVERNMENT DEPOSITS

SEC. 15. The moneys held in the general fund of the Treasury, except the five per centum fund for the redemption of outstanding national-bank notes and the funds provided in this Act for the redemption of Federal reserve notes may, upon the direction of the Secretary of the Treasury, be deposited in Federal reserve banks, which banks, when required by the Secretary of the Treasury, shall act as fiscal agents of the United States; and the revenues of the Government or any part thereof may be deposited in such banks, and disbursements may be made by checks drawn against such deposits.

No public funds of the Philippine Islands, or of the postal savings, or any Government funds, shall be deposited in the continental United States in any bank not belonging to the system established by this Act:¹ *Provided, however,*

¹ Section 7 of the act approved April 24, 1917, known as "An act to authorize an issue of bonds to meet expenditures for the national security and defense, and, for the purpose of assisting in the prosecution of the war, to extend credit to foreign governments, and for other purposes," authorizes the Secretary to deposit proceeds of sale of such bonds in non-member banks under certain circumstances. For full text of Section 7 see Appendix, p.

That nothing in this Act shall be construed to deny the right of the Secretary of the Treasury to use member banks as depositories.

NOTE ISSUES

Notes are obligations of U. S. redeemable in gold on demand.

SEC. 16.² Federal reserve notes, to be issued at the discretion of the Federal Reserve Board for the purpose of making advances to Federal reserve banks through the Federal reserve agents as hereinafter set forth and for no other purpose, are hereby authorized. The said notes shall be obligations of the United States and shall be receivable by all national and member banks and Federal reserve banks and for all taxes, customs, and other public dues. They shall be redeemed in gold on demand at the Treasury Department of the United States, in the city of Washington, District of Columbia, or in gold or lawful money at any Federal reserve bank.

Method and conditions of note issue.

Any Federal reserve bank may make application to the local Federal reserve agent for such amount of the Federal reserve notes hereinbefore provided for as it may require. Such application shall be accompanied with a tender to the local Federal reserve agent of collateral in amount equal to the sum of the Federal reserve notes thus applied for and issued pursuant to such application. The collateral security thus offered shall be notes, drafts, bills of exchange, or acceptances acquired under the provisions of section thirteen of this Act, or bills of exchange indorsed by a member bank of any Federal reserve district and purchased under the provisions of section fourteen of this Act, or bankers' acceptances purchased under the

² As amended by act approved Sept. 7, 1916 (39 Stat., 752, chap. 461); act approved June 21, 1917 (40 Stat., chap. 32).

provisions of said section fourteen, or gold or gold certificates; but in no event shall such collateral security, whether gold, gold certificates, or eligible paper, be less than the amount of Federal reserve notes applied for. The Federal reserve agent shall each day notify the Federal Reserve Board of all issues and withdrawals of Federal reserve notes to and by the Federal reserve bank to which he is accredited. The said Federal Reserve Board may at any time call upon a Federal reserve bank for additional security to protect the Federal reserve notes issued to it.

Every Federal reserve bank shall maintain reserves in gold or lawful money of not less than thirty-five per centum against its deposits and reserves in gold of not less than forty per centum against its Federal reserve notes in actual circulation: *Provided, however,* That when the Federal reserve agent holds gold or gold certificates as collateral for Federal reserve notes issued to the bank such gold or gold certificates shall be counted as part of the gold reserve which such bank is required to maintain against its Federal reserve notes in actual circulation. Notes so paid out shall bear upon their faces a distinctive letter and serial number which shall be assigned by the Federal Reserve Board to each Federal reserve bank. Whenever Federal reserve notes issued through one Federal reserve bank shall be received by another Federal reserve bank, they shall be promptly returned for credit or redemption to the Federal reserve bank through which they were originally issued or, upon direction of such Federal reserve bank, they shall be forwarded direct to the Treasurer of the United States to be retired. No Federal reserve bank shall pay out notes issued through another under penalty of a tax of ten per centum

Reserve requirements of federal reserve banks, and redemption of notes.

APPENDIX B

upon the face value of notes so paid out. Notes presented for redemption at the Treasury of the United States shall be paid out of the redemption fund and returned to the Federal reserve banks through which they were originally issued, and thereupon such Federal reserve bank shall, upon demand of the Secretary of the Treasury, reimburse such redemption fund in lawful money or, if such Federal reserve notes have been redeemed by the Treasurer in gold or gold certificates, then such funds shall be reimbursed to the extent deemed necessary by the Secretary of the Treasury in gold or gold certificates, and such Federal reserve bank shall, so long as any of its Federal reserve notes remain outstanding, maintain with the Treasurer in gold an amount sufficient in the judgment of the Secretary to provide for all redemptions to be made by the Treasurer. Federal reserve notes received by the Treasurer otherwise than for redemption may be exchanged for gold out of the redemption fund hereinafter provided and returned to the reserve bank through which they were originally issued, or they may be returned to such bank for the credit of the United States. Federal reserve notes unfit for circulation shall be returned by the Federal reserve agents to the Comptroller of the Currency for cancellation and destruction.

The Federal Reserve Board shall require each Federal reserve bank to maintain on deposit in the Treasury of the United States a sum in gold sufficient in the judgment of the Secretary of the Treasury for the redemption of the Federal reserve notes issued to such bank, but in no event less than five per centum of the total amount of notes issued less the amount of gold or gold certificates held by the Federal reserve agent as collateral security; but such deposit of

gold shall be counted and included as part of the forty per centum reserve hereinbefore required. The board shall have the right, acting through the Federal reserve agent, to grant in whole or in part or to reject entirely the application of any Federal reserve bank for Federal reserve notes; but to the extent that such application may be granted the Federal Reserve Board shall, through its local Federal reserve agent, supply Federal reserve notes to the banks so applying, and such bank shall be charged with the amount of notes issued to it and shall pay such rate of interest as may be established by the Federal Reserve Board on only that amount of such notes which equals the total amount of its outstanding Federal reserve notes less the amount of gold or gold certificates held by the Federal reserve agent as collateral security. Federal reserve notes issued to any such bank shall, upon delivery, together with such notes of such Federal reserve bank as may be issued under section eighteen of this act upon security of United States two per centum Government bonds, become a first and paramount lien on all the assets of such bank.

Any Federal reserve bank may at any time reduce its liability for outstanding Federal reserve notes by depositing with the Federal reserve agent its Federal reserve notes, gold, gold certificates, or lawful money of the United States. Federal reserve notes so deposited shall not be reissued, except upon compliance with the conditions of an original issue.

The Federal reserve agent shall hold such gold, gold certificates, or lawful money available exclusively for exchange for the outstanding Federal reserve notes when offered by the reserve bank of which he is a director. Upon the request of the Secretary of the Treasury the

Gold and
lawful money
on deposit
with federal
reserve agent.

Substitution
of collateral
with federal
reserve agent.

Federal Reserve Board shall require the Federal reserve agent to transmit to the Treasurer of the United States so much of the gold held by him as collateral security for Federal reserve notes as may be required for the exclusive purpose of the redemption of such Federal reserve notes, but such gold when deposited with the Treasurer shall be counted and considered as if collateral security on deposit with the Federal reserve agent.

Retirement
of federal re-
serve notes.

Any Federal reserve bank may at its discretion withdraw collateral deposited with the local Federal reserve agent for the protection of its Federal reserve notes issued to it and shall at the same time substitute therefor other collateral of equal amount with the approval of the Federal reserve agent under regulations to be prescribed by the Federal Reserve Board. Any Federal reserve bank may retire any of its Federal reserve notes by depositing them with the Federal reserve agent or with the Treasurer of the United States, and such Federal reserve bank shall thereupon be entitled to receive back the collateral deposited with the Federal reserve agent for the security of such notes. Federal reserve banks shall not be required to maintain the reserve or the redemption fund heretofore provided for against Federal reserve notes which have been retired. Federal reserve notes so deposited shall not be reissued except upon compliance with the conditions of an original issue.

Custody of
funds deposit-
ed with feder-
al reserve
agent.

All Federal reserve notes and all gold, gold certificates, and lawful money issued to or deposited with any Federal reserve agent under the provisions of the Federal reserve act shall hereafter be held for such agent, under such rules and regulations as the Federal Reserve Board may prescribe, in the joint custody of himself and the Federal reserve bank to which

he is accredited. Such agent and such Federal reserve bank shall be jointly liable for the safe-keeping of such Federal reserve notes, gold, gold certificates, and lawful money. Nothing herein contained, however, shall be construed to prohibit a Federal reserve agent from depositing gold or gold certificates with the Federal Reserve Board, to be held by such board subject to his order, or with the Treasurer of the United States for the purposes authorized by law.

In order to furnish suitable notes for circulation as Federal reserve notes, the Comptroller of the Currency shall, under the direction of the Secretary of the Treasury, cause plates and dies to be engraved in the best manner to guard against counterfeits and fraudulent alterations, and shall have printed therefrom and numbered such quantities of such notes of the denominations of \$5, \$10, \$20, \$50, \$100, \$500, \$1000, \$5000, \$10,000, as may be required to supply the Federal reserve banks. Such notes shall be in form and tenor as directed by the Secretary of the Treasury under the provisions of this Act and shall bear the distinctive numbers of the several Federal reserve banks through which they are issued.

Physical
character and
denominations
of federal re-
serve notes.

When such notes have been prepared, they shall be deposited in the Treasury, or in the subtreasury or mint of the United States nearest the place of business of each Federal reserve bank and shall be held for the use of such bank subject to the order of the Comptroller of the Currency for their delivery, as provided by this Act.

The plates and dies to be procured by the Comptroller of the Currency for the printing of such circulating notes shall remain under his control and direction, and the expenses neces-

APPENDIX B

sarily incurred in executing the laws relating to the procuring of such notes, and all other expenses incidental to their issue and retirement, shall be paid by the Federal reserve banks, and the Federal Reserve Board shall include in its estimate of expenses levied against the Federal reserve banks a sufficient amount to cover the expenses herein provided for.

The examination of plates, dies, bed pieces, and so forth, and regulations relating to such examination of plates, dies, and so forth, of national-bank notes provided for in section fifty-one hundred and seventy-four, Revised Statutes, is hereby extended to include notes herein provided for.

Any appropriation heretofore made out of the general funds of the Treasury for engraving plates and dies, the purchase of distinctive paper, or to cover any other expense in connection with the printing of national-bank notes or notes provided for by the Act of May thirtieth, nineteen hundred and eight, and any distinctive paper that may be on hand at the time of the passage of this Act may be used in the discretion of the Secretary for the purposes of this Act, and should the appropriations heretofore made be insufficient to meet the requirements of this Act in addition to circulating notes provided for by existing law, the Secretary is hereby authorized to use so much of any funds in the Treasury not otherwise appropriated for the purpose of furnishing the notes aforesaid: *Provided, however,* That nothing in this section contained shall be construed as exempting national banks or Federal reserve banks from their liability to reimburse the United States for any expenses incurred in printing and issuing circulating notes.

Every Federal reserve bank shall receive on

deposit at par from member banks or from Federal reserve banks checks and drafts drawn upon any of its depositors, and when remitted by a Federal reserve bank, checks and drafts drawn by any depositor in any other Federal reserve bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank. Nothing herein contained shall be construed as prohibiting a member bank from charging its actual expense incurred in collecting and remitting funds, or for exchange sold to its patrons. The Federal Reserve Board shall, by rule, fix the charges to be collected by the member banks from its patrons whose checks are cleared through the Federal reserve bank and the charge which may be imposed for the service of clearing or collection rendered by the Federal reserve bank.

Clearing and
collection sys-
tem.

The Federal Reserve Board shall make and promulgate from time to time regulations governing the transfer of funds and charges therefor among Federal reserve banks and their branches, and may at its discretion exercise the functions of a clearing house for such Federal reserve banks, or may designate a Federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks.

That the Secretary of the Treasury is hereby authorized and directed to receive deposits of gold coin or of gold certificates with the Treasurer or an assistant treasurer of the United States when tendered by any Federal reserve bank or Federal reserve agent for credit to its or his account with the Federal Reserve Board. The Secretary shall prescribe by regulation the form of receipt to be issued by the Treasurer or Assistant Treasurer to the Federal reserve bank or Federal reserve agent making the de-

Gold settle-
ment fund.

APPENDIX B

posit, and a duplicate of such receipt shall be delivered to the Federal Reserve Board by the Treasurer at Washington upon proper advices from any assistant treasurer that such deposit has been made. Deposits so made shall be held subject to the orders of the Federal Reserve Board and shall be payable in gold coin or gold certificates on the order of the Federal Reserve Board to any Federal reserve bank or Federal reserve agent at the Treasury or at the Subtreasury of the United States nearest the place of business of such Federal reserve bank or such Federal reserve agent: *Provided, however,* That any expense incurred in shipping gold to or from the Treasury or subtreasuries in order to make such payments, or as a result of making such payments, shall be paid by the Federal Reserve Board and assessed against the Federal reserve banks. The order used by the Federal Reserve Board in making such payments shall be signed by the governor or vice governor, or such other officers or members as the board may by regulation prescribe. The form of such order shall be approved by the Secretary of the Treasury.

The expenses necessarily incurred in carrying out these provisions, including the cost of the certificates or receipts issued for deposits received, and all expenses incident to the handling of such deposits shall be paid by the Federal Reserve Board and included in its assessments against the several Federal reserve banks.

Gold deposits standing to the credit of any Federal reserve bank with the Federal Reserve Board shall, at the option of said bank, be counted as part of the lawful reserve which it is required to maintain against outstanding Federal reserve notes, or as a part of the reserve it is required to maintain against deposits.

Nothing in this section shall be construed as amending section six of the Act of March fourteenth, nineteen hundred, as amended by the Acts of March fourth, nineteen hundred and seven, March second, nineteen hundred and eleven, and June twelfth, nineteen hundred and sixteen, nor shall the provisions of this section be construed to apply to the deposits made or to the receipts or certificates issued under those Acts.

SEC. 17.¹ So much of the provisions of section fifty-one hundred and fifty-nine of the Revised Statutes of the United States, and section four of the Act of June twentieth, eighteen hundred and seventy-four, and section eight of the Act of July twelfth, eighteen hundred and eighty-two, and of any other provisions of existing statutes as require that before any national banking association shall be authorized to commence banking business it shall transfer and deliver to the Treasurer of the United States a stated amount of United States registered bonds, and so much of those provisions or of any other provisions of existing statutes as require any national banking association now or hereafter organized to maintain a minimum deposit of such bonds with the Treasurer is hereby repealed.

Deposit of
bonds by na-
tional banks
with treasurer
of U. S. as a
condition of
commencing
business no
longer re-
quired.

REFUNDING BONDS

SEC. 18. After two years from the passage of this Act, and at any time during a period of twenty years thereafter, any member bank desiring to retire the whole or any part of its circulating notes, may file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, United States bonds securing circulation to be retired.

¹ As amended by act approved June 21, 1917 (40 Stat., chap. 32).

APPENDIX B

The Treasurer shall, at the end of each quarterly period, furnish the Federal Reserve Board with a list of such applications, and the Federal Reserve Board may, in its discretion, require the Federal reserve banks to purchase such bonds from the banks whose applications have been filed with the Treasurer at least ten days before the end of any quarterly period at which the Federal Reserve Board may direct the purchase to be made: *Provided*, That Federal reserve banks shall not be permitted to purchase an amount to exceed \$25,000,000 of such bonds in any one year, and which amount shall include bonds acquired under section four of this Act by the Federal reserve bank.

Provided further, That the Federal Reserve Board shall allot to each Federal reserve bank such proportion of such bonds as the capital and surplus of such bank shall bear to the aggregate capital and surplus of all the Federal reserve banks.

Upon notice from the Treasurer of the amount of bonds so sold for its account, each member bank shall duly assign and transfer, in writing, such bonds to the Federal reserve bank purchasing the same, and such Federal reserve bank shall, thereupon, deposit lawful money with the Treasurer of the United States for the purchase price of such bonds, and the Treasurer shall pay to the member bank selling such bonds any balance due after deducting a sufficient sum to redeem its outstanding notes secured by such bonds, which notes shall be canceled and permanently retired when redeemed.

The Federal reserve banks purchasing such bonds shall be permitted to take out an amount of circulating notes equal to the par value of such bonds.

Upon the deposit with the Treasurer of the

United States of bonds so purchased, or any bonds with the circulating privilege acquired under section four of this Act, any Federal reserve bank making such deposit in the manner provided by existing law, shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited. Such notes shall be the obligations of the Federal reserve bank procuring the same, and shall be in form prescribed by the Secretary of the Treasury, and to the same tenor and effect as national-bank notes now provided by law. They shall be issued and redeemed under the same terms and conditions as national-bank notes except that they shall not be limited to the amount of the capital stock of the Federal reserve bank issuing them.

Federal re-
serve bank
notes.

Upon application of any Federal reserve bank, approved by the Federal Reserve Board, the Secretary of the Treasury may issue, in exchange for United States two per centum gold bonds bearing the circulation privilege, but against which no circulation is outstanding, one-year gold notes of the United States without the circulation privilege, to an amount not to exceed one-half of the two per centum bonds so tendered for exchange, and thirty-year three per centum gold bonds without the circulation privilege for the remainder of the two per centum bonds so tendered: *Provided*, That at the time of such exchange the Federal reserve bank obtaining such one-year gold notes shall enter into an obligation with the Secretary of the Treasury binding itself to purchase from the United States for gold at the maturity of such one-year notes, an amount equal to those delivered in exchange for such bonds, if so requested by

Substitution
for 2 per cent
bonds of 30-
year 3 per
cent bonds and
one-year 3 per
cent notes.

APPENDIX B

the Secretary, and at each maturity of one-year notes so purchased by such Federal reserve bank, to purchase from the United States such an amount of one-year notes as the Secretary may tender to such bank, not to exceed the amount issued to such bank in the first instance, in exchange for the two per centum United States gold bonds; said obligation to purchase at maturity such notes shall continue in force for a period not to exceed thirty years.

For the purpose of making the exchange herein provided for, the Secretary of the Treasury is authorized to issue at par Treasury notes in coupon or registered form as he may prescribe in denominations of one hundred dollars, or any multiple thereof, bearing interest at the rate of three per centum per annum, payable quarterly, such Treasury notes to be payable not more than one year from the date of their issue in gold coin of the present standard value, and to be exempt as to principal and interest from the payment of all taxes and duties of the United States except as provided by this Act, as well as from taxes in any form by or under State, municipal, or local authorities. And for the same purpose, the Secretary is authorized and empowered to issue United States gold bonds at par, bearing three per centum interest payable thirty years from date of issue, such bonds to be of the same general tenor and effect and to be issued under the same general terms and conditions as the United States three per centum bonds without the circulation privilege now issued and outstanding.

Upon application of any Federal reserve bank, approved by the Federal Reserve Board, the Secretary may issue at par such three per centum bonds in exchange for the one-year gold notes herein provided for.

BANK RESERVES

SEC. 19.¹ Demand deposits within the meaning of this Act shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days, all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment, and all postal savings deposits.²

Demand de-
posits and
time deposits.

Every bank, banking association, or trust company which is or which becomes a member of any Federal reserve bank shall establish and maintain reserve balances with its Federal reserve bank as follows:

(a) If not in a reserve or central reserve city, as now or hereafter defined, it shall hold and maintain with the Federal reserve bank of its district an actual net balance equal to not less than seven per centum of the aggregate amount of its demand deposits and three per centum of its time deposits.

Reserves of
"country
banks."

(b) If in a reserve city, as now or hereafter defined, it shall hold and maintain with the Federal reserve bank of its district an actual net balance equal to not less than ten per centum of the aggregate amount of its demand deposits and three per centum of its time deposits: *Provided, however,* That if located in the outlying districts of a reserve city or in a territory added to such a city by the extension of its corporate charter, it may, upon the affirmative vote of five members of the federal reserve board, hold and maintain the reserve balances specified in paragraph (a) hereof.

Reserves of
reserve city
banks.

¹ As amended by act approved Aug. 15, 1914 (38 Stat., 691, chap. 252); act approved June 21, 1917 (40 Stat., chap. 32).

² Government deposits other than postal savings deposits not subject to reserve requirements. See section 7 of act approved April 24, 1917, Appendix, p. 51

Reserves of
central reserve
city banks.

(c) If in a central reserve city, as now or hereafter defined, it shall hold and maintain with the Federal reserve bank of its district an actual net balance equal to not less than thirteen per centum of the aggregate amount of its demand deposits and three per centum of its time deposits: *Provided, however,* That if located in the outlying districts of a central reserve city or in territory added to such city by the extension of its corporate charter, it may, upon the affirmative vote of five members of the federal reserve board, hold and maintain the reserve balances specified in paragraphs (a) or (b) thereof.

No member bank shall keep on deposit with any State bank or trust company which is not a member bank a sum in excess of ten per centum of its own paid-up capital and surplus. No member bank shall act as the medium or agent of a nonmember bank in applying for or receiving discounts from a Federal reserve bank under the provisions of this Act, except by permission of the Federal Reserve Board.

Other provisions regard-
ing reserves.

The required balance carried by a member bank with a Federal reserve bank may, under the regulations and subject to such penalties as may be prescribed by the Federal Reserve Board, be checked against and withdrawn by such member bank for the purpose of meeting existing liabilities: *Provided, however,* That no bank shall at any time make new loans or shall pay any dividends unless and until the total balance required by law is fully restored.

In estimating the balances required by this Act, the net difference of amounts due to and from other banks shall be taken as the basis for ascertaining the deposits against which required balances with Federal reserve banks shall be determined.

National banks, or banks organized under local laws, located in Alaska or in a dependency or insular possession or any part of the United States outside the continental United States may remain nonmember banks, and shall in that event maintain reserves and comply with all the conditions now provided by law regulating them; or said banks may, with the consent of the Reserve Board, become member banks of any one of the reserve districts, and shall in that event take stock, maintain reserves, and be subject to all the other provisions of this Act.

SEC. 20. So much of sections two and three of the Act of June twentieth, eighteen hundred and seventy-four, entitled "An Act fixing the amount of United States notes, providing for a redistribution of the national-bank currency, and for other purposes," as provides that the fund deposited by any national banking association with the Treasurer of the United States for the redemption of its notes shall be counted as a part of its lawful reserve as provided in the Act aforesaid, is hereby repealed. And from and after the passage of this Act such fund of five per centum shall in no case be counted by any national banking association as a part of its lawful reserve.

Five per cent redemption fund no longer countable as part of legal reserve.

BANK EXAMINATIONS

SEC. 21. Section fifty-two hundred and forty, United States Revised Statutes, is amended to read as follows:

The Comptroller of the Currency, with the approval of the Secretary of the Treasury, shall appoint examiners who shall examine every member bank¹ at least twice in each calendar

Examination of member banks.

¹ Except banks admitted to membership in the system under authority of section 9 of this act. See section 9 of this act as amended by act approved June 21, 1917.

year and oftener if considered necessary: *Provided, however,* That the Federal Reserve Board may authorize examination by the State authorities to be accepted in the case of State banks and trust companies and may at any time direct the holding of a special examination of State banks or trust companies that are stockholders in any Federal reserve bank. The examiner making the examination of any national bank, or of any other member bank, shall have power to make a thorough examination of all the affairs of the bank, and in doing so he shall have power to administer oaths and to examine any of the officers and agents thereof under oath and shall make a full and detailed report of the condition of said bank to the Comptroller of the Currency.

The Federal Reserve Board, upon the recommendation of the Comptroller of the Currency, shall fix the salaries of all bank examiners and make report thereof to Congress. The expense of the examinations herein provided for shall be assessed by the Comptroller of the Currency upon the banks examined in proportion to assets or resources held by the banks upon the dates of examination of the various banks.

Additional
examinations
by federal re-
serve authori-
ties authorized.

In addition to the examinations made and conducted by the Comptroller of the Currency, every Federal reserve bank may, with the approval of the Federal reserve agent or the Federal Reserve Board, provide for special examination of member banks within its district. The expense of such examinations shall be borne by the bank examined. Such examinations shall be so conducted as to inform the Federal reserve bank of the condition of its member banks and of the lines of credit which are being extended by them. Every Federal reserve bank shall at all times furnish to the Federal Reserve Board such information as may

be demanded concerning the condition of any member bank within the district of the said Federal reserve bank.

No bank shall be subject to any visitatorial powers other than such as are authorized by law, or vested in the courts of justice or such as shall be or shall have been exercised or directed by Congress, or by either House thereof or by any committee of Congress or of either House duly authorized.

The Federal Reserve Board shall, at least once each year, order an examination of each Federal reserve bank, and upon joint application of ten member banks the Federal Reserve Board shall order a special examination and report of the condition of any Federal reserve bank.

Examination
of federal re-
serve banks.

SEC. 22.¹ No member bank and no officer, director, or employee thereof shall hereafter make any loan or grant any gratuity to any bank examiner. Any bank officer, director, or employee violating this provision shall be deemed guilty of a misdemeanor and shall be imprisoned not exceeding one year or fined not more than \$5,000, or both; and may be fined a further sum equal to the money so loaned or gratuity given.

Restrictions
imposed upon
bank officials,
employees and
examiners.

(a) Any examiner accepting a loan or gratuity from any bank examined by him or from an officer, director, or employee thereof shall be deemed guilty of a misdemeanor and shall be imprisoned one year or fined not more than \$5,000, or both; and may be fined a further sum equal to the money so loaned or gratuity given, and shall forever thereafter be disqualified from holding office as a national-bank examiner.

(b) No national-bank examiner shall perform

¹ As amended by acts approved June 21, 1917 (40 Stat., chap. 32), and Sept. 26, 1918.

APPENDIX B

any other service for compensation while holding such office for any bank or officer, director, or employee thereof.

No examiner, public or private, shall disclose the names of borrowers or the collateral for loans of a member bank to other than the proper officers of such bank without first having obtained the express permission in writing from the Comptroller of the Currency, or from the board of directors of such bank, except when ordered to do so by a court of competent jurisdiction, or by direction of the Congress of the United States, or of either House thereof, or any committee of Congress, or of either House duly authorized. Any bank examiner violating the provisions of this subsection shall be imprisoned not more than one year or fined not more than \$5,000, or both.

(c) Except as herein provided, any officer, director, employee, or attorney of a member bank who stipulates for or receives or consents or agrees to receive any fee, commission, gift, or thing of value from any person, firm, or corporation, for procuring or endeavoring to procure for such person, firm, or corporation, or for any other person, firm, or corporation, any loan from or the purchase or discount of any paper, note, draft, check, or bill of exchange by such member bank shall be deemed guilty of a misdemeanor and shall be imprisoned not more than one year or fined not more than \$5,000, or both.

(d) Any member bank may contract for, or purchase from, any of its directors or from any firm of which any of its directors is a member, any securities or other property, when (and not otherwise) such purchase is made in the regular course of business upon terms not less favorable to the bank than those offered to others, or when such purchase is authorized by a majority

APPENDIX B

of the board of directors not interested in the sale of such securities or property, such authority to be evidenced by the affirmative vote or written assent of such directors: *Provided, however,* That when any director, or firm of which any director is a member, acting for or on behalf of others, sells securities or other property to a member bank, the Federal Reserve Board by regulation may, in any or all cases, require a full disclosure to be made, on forms to be prescribed by it, of all commissions or other considerations received, and whenever such director or firm, acting in his or its own behalf, sells securities or other property to the bank the Federal Reserve Board, by regulation, may require a full disclosure of all profit realized from such sale.

Any member bank may sell securities or other property to any of its directors, or to a firm of which any of its directors is a member, in the regular course of business on terms not more favorable to such director or firm than those offered to others, or when such sale is authorized by a majority of the board of directors of a member bank to be evidenced by their affirmative vote or written assent: *Provided, however,* That nothing in this subsection contained shall be construed as authorizing member banks to purchase or sell securities or other property which such banks are not otherwise authorized by law to purchase or sell.

(e) No member bank shall pay to any director, officer, attorney, or employee a greater rate of interest on the deposits of such director, officer, attorney, or employee than that paid to other depositors on similar deposits with such member bank.

(f) If the directors or officers of any member bank shall knowingly violate or permit any

APPENDIX B

of the agents, officers, or directors of any member bank to violate any of the provisions of this section or regulations of the board made under authority thereof, every director and officer participating in or assenting to such violation shall be held liable in his personal and individual capacity for all damages which the member bank, its shareholders, or any other persons shall have sustained in consequence of such violation.

Other than the usual salary or director's fee paid to any officer, director, employee, or attorney of a member bank, and other than a reasonable fee paid by said bank to such officer, director, employee, or attorney for services rendered to such bank, no officer, director, employee, or attorney of a member bank shall be a beneficiary of or receive, directly or indirectly, any fee, commission, gift, or other consideration for or in connection with any transaction or business of the bank: *Provided, however,* That nothing in this act contained shall be construed to prohibit a director, officer, employee, or attorney from receiving the same rate of interest paid to other depositors for similar deposits made with such bank: *And provided further,* That notes, drafts, bills of exchange, or other evidences of debt executed or indorsed by directors or attorneys of a member bank may be discounted with such member bank on the same terms and conditions as other notes, drafts, bills of exchange, or evidences of debt upon the affirmative vote or written assent of at least a majority of the members of the board of directors of such member bank. No examiner, public or private, shall disclose the names of borrowers or the collateral for loans of a member bank to other than the proper officers of such bank without first having obtained the express permission in writing from the Comptroller of the Cur-

rency, or from the board of directors of such bank, except when ordered to do so by a court of competent jurisdiction, or by direction of the Congress of the United States, or of either House thereof, or any committee of Congress or of either House duly authorized. Any person violating any provision of this section shall be punished by a fine of not exceeding \$5,000 or by imprisonment not exceeding one year, or both.

Except as provided in existing laws, this provision shall not take effect until sixty days after the passage of this Act.

SEC. 23. The stockholders of every national banking association shall be held individually responsible for all contracts, debts, and engagements of such association, each to the amount of his stock therein, at the par value thereof in addition to the amount invested in such stock. The stockholders in any national banking association who shall have transferred their shares or registered the transfer thereof within sixty days next before the date of the failure of such association to meet its obligations, or with knowledge of such impending failure, shall be liable to the same extent as if they had made no such transfer, to the extent that the subsequent transferee fails to meet such liability; but this provision shall not be construed to affect in any way any recourse which such shareholders might otherwise have against those in whose names such shares are registered at the time of such failure.

Double liability of stockholders.

LOANS ON FARM LANDS

SEC. 24.¹ Any national banking association not situated in a central reserve city may make

¹ As amended by act approved Sept. 7, 1916 (39 Stat., 752, chap. 461).

APPENDIX B

loans secured by improved and unencumbered farm land situated within its Federal reserve district or within a radius of one hundred miles of the place in which such bank is located, irrespective of district lines, and may also make loans secured by improved and unencumbered real estate located within one hundred miles of the place in which such bank is located, irrespective of district lines; but no loan made upon the security of such farm land shall be made for a longer time than five years, and no loan made upon the security of such real estate as distinguished from farm land shall be made for a longer time than one year nor shall the amount of any such loan, whether upon such farm land or upon such real estate, exceed fifty per centum of the actual value of the property offered as security. Any such bank may make such loans, whether secured by such farm land or such real estate, in an aggregate sum equal to twenty-five per centum of its capital and surplus or to one-third of its time deposits and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same.

The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans secured upon real estate in the manner described in this section.

FOREIGN BRANCHES

SEC. 25.¹ Any national banking association possessing a capital and surplus of \$1,000,000 or more may file application with the Federal Reserve Board for permission to exercise, upon such conditions and under such regulations as

¹ As amended by act approved Sept. 7, 1916 (39 Stat., 752, chap. 461).

may be prescribed by the said board, either or both of the following powers:

First. To establish branches in foreign countries or dependencies or insular possessions of the United States for the furtherance of the foreign commerce of the United States, and to act if required to do so as fiscal agents of the United States.

Second. To invest an amount not exceeding in the aggregate ten per centum of its paid-in capital stock and surplus in the stock of one or more banks or corporations chartered or incorporated under the laws of the United States or of any State thereof, and principally engaged in international or foreign banking, or banking in a dependency or insular possession of the United States either directly or through the agency, ownership, or control of local institutions in foreign countries, or in such dependencies or insular possessions.

Such application shall specify the name and capital of the banking association filing it, the powers applied for, and the place or places where the banking operations proposed are to be carried on. The Federal Reserve Board shall have power to approve or to reject such application in whole or in part if for any reason the granting of such application is deemed inexpedient, and shall also have power from time to time to increase or decrease the number of places where such banking operations may be carried on.

Every national banking association operating foreign branches shall be required to furnish information concerning the condition of such branches to the Comptroller of the Currency upon demand, and every member bank investing in the capital stock of banks or corporations described under subparagraph two of the first

Supervision
of foreign
branches.

paragraph of this section shall be required to furnish information concerning the condition of such banks or corporations to the Federal Reserve Board upon demand, and the Federal Reserve Board may order special examinations of the said branches, banks, or corporations at such time or times as it may deem best.

Restrictions
upon foreign
branches.

Before any national bank shall be permitted to purchase stock in any such corporation the said corporation shall enter into an agreement or undertaking with the Federal Reserve Board to restrict its operations or conduct its business in such manner or under such limitations and restrictions as the said board may prescribe for the place or places wherein such business is to be conducted. If at any time the Federal Reserve Board shall ascertain that the regulations prescribed by it are not being complied with, said board is hereby authorized and empowered to institute an investigation of the matter and to send for persons and papers, subpoena witnesses, and administer oaths in order to satisfy itself as to the actual nature of the transactions referred to. Should such investigation result in establishing the failure of the corporation in question, or of the national bank or banks which may be stockholders therein, to comply with the regulations laid down by the said Federal Reserve Board, such national banks may be required to dispose of stock holdings in the said corporation upon reasonable notice.

Every such national banking association shall conduct the accounts of each foreign branch independently of the accounts of other foreign branches established by it and of its home office, and shall at the end of each fiscal period transfer to its general ledger the profit or loss accrued at each branch as a separate item.

Any director or other officer, agent, or employee of any member bank may, with the approval of the Federal Reserve Board, be a director or other officer, agent, or employee of any such bank or corporation above mentioned in the capital stock of which such member bank shall have invested as hereinbefore provided, without being subject to the provisions of section eight of the Act approved October fifteen, nineteen hundred and fourteen, entitled "An Act to supplement existing laws against unlawful restraints and monopolies, and for other purposes."

SEC. 26. All provisions of law inconsistent with or superseded by any of the provisions of this Act are to that extent and to that extent only hereby repealed: *Provided*, Nothing in this Act contained shall be construed to repeal the parity provision or provisions contained in an Act approved March fourteenth, nineteen hundred, entitled "An Act to define and fix the standard of value, to maintain the parity of all forms of money issued or coined by the United States, to refund the public debt, and for other purposes," and the Secretary of the Treasury may, for the purpose of maintaining such parity and to strengthen the gold reserve, borrow gold on the security of United States bonds authorized by section two of the Act last referred to or for one-year gold notes bearing interest at a rate of not to exceed three per centum per annum, or sell the same if necessary to obtain gold. When the funds of the Treasury on hand justify, he may purchase and retire such outstanding bonds and notes.

Gold stand-
ard reaffirmed.

SEC. 27.¹ The provisions of the Act of May

¹ As amended by act approved Aug. 4, 1914 (38 Stat., 682, chap. 225).

"Aldrich-Vreeland emergency act" extended to June 30, 1915, and revised.

thirtieth, nineteen hundred and eight, authorizing national currency associations, the issue of additional national-bank circulation, and creating a National Monetary Commission, which expires by limitation under the terms of such Act on the thirtieth day of June, nineteen hundred and fourteen, are hereby extended to June thirtieth, nineteen hundred and fifteen, and sections fifty-one hundred and fifty-three, fifty-one hundred and seventy-two, fifty-one hundred and ninety-one, and fifty-two hundred and fourteen of the Revised Statutes of the United States, which were amended by the Act of May thirtieth, nineteen hundred and eight, are hereby reenacted to read as such sections read prior to May thirtieth, nineteen hundred and eight, subject to such amendments or modifications as are prescribed in this Act: *Provided, however,* That section nine of the Act first referred to in this section is hereby amended so as to change the tax rates fixed in said Act by making the portion applicable thereto read as follows:

National banking associations having circulating notes secured otherwise than by bonds of the United States, shall pay for the first three months a tax at the rate of three per centum per annum upon the average amount of such of their notes in circulation as are based upon the deposit of such securities, and afterwards an additional tax rate of one-half of one per centum per annum for each month until a tax of six per centum per annum is reached, and thereafter such tax of six per centum per annum upon the average amount of such notes: *Provided further,* That whenever in his judgment he may deem it desirable, the Secretary of the Treasury shall have power to suspend the limitations imposed by section one and section three of the Act referred to in this section,

which prescribe that such additional circulation secured otherwise than by bonds of the United States shall be issued only to National banks having circulating notes outstanding secured by the deposit of bonds of the United States to an amount not less than forty per centum of the capital stock of such banks, and to suspend also the conditions and limitations of section five of said Act except that no bank shall be permitted to issue circulating notes in excess of one hundred and twenty-five per centum of its unimpaired capital and surplus. He shall require each bank and currency association to maintain on deposit in the Treasury of the United States a sum in gold sufficient in his judgment for the redemption of such notes, but in no event less than five per centum. He may permit National banks, during the period for which such provisions are suspended, to issue additional circulation under the terms and conditions of the Act referred to as herein amended: *Provided further*, That the Secretary of the Treasury, in his discretion, is further authorized to extend the benefits of this Act to all qualified State banks and trust companies, which have joined the Federal reserve system, or which may contract to join within fifteen days after the passage of this Act.

SEC. 28. Section fifty-one hundred and forty-three of the Revised Statutes is hereby amended and reenacted to read as follows: Any association formed under this title may, by the vote of shareholders owning two-thirds of its capital stock, reduce its capital to any sum not below the amount required by this title to authorize the formation of associations; but no such reduction shall be allowable which will reduce the capital of the association below the

Reduction of
capital by
member banks.

APPENDIX B

amount required for its outstanding circulation, nor shall any reduction be made until the amount of the proposed reduction has been reported to the Comptroller of the Currency and such reduction has been approved by the said Comptroller of the Currency and by the Federal Reserve Board, or by the organization committee pending the organization of the Federal Reserve Board.

SEC. 29. If any clause, sentence, paragraph, or part of this Act shall for any reason be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder of this Act, but shall be confined in its operation to the clause, sentence, paragraph, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

SEC. 30. The right to amend, alter, or repeal this Act is hereby expressly reserved.

APPENDIX C

Provisions of the Farm Loan Act, approved July 17, 1916, which affect Federal Reserve Banks and member banks of the Federal Reserve System.

FARM LOAN ACT

An Act To provide capital for agricultural development, to create standard forms of investment based upon farm mortgage, to equalize rates of interest upon farm loans, to furnish a market for United States bonds, to create Government depositaries and financial agents for the United States, and for other purposes.

CAPITAL STOCK OF FEDERAL LAND BANKS

SEC. 5.—

* * * * *

At least twenty-five per centum of that part of the capital of any Federal land bank for which stock is outstanding in the name of national farm loan associations shall be held in quick assets, and may consist of cash in the vaults of said land bank, or in deposits in member banks of the Federal reserve system, or in readily marketable securities which are approved under rules and regulations of the Federal Farm Loan Board: *Provided*, That not less than five per centum of such capital shall be invested in United States Government bonds.

GOVERNMENT DEPOSITARIES

SEC. 6. That all Federal land banks and joint stock land banks organized under this

APPENDIX C

Act, when designated for that purpose by the Secretary of the Treasury, shall be depositaries of public money, except receipts from customs, under such regulations as may be prescribed by said Secretary; and they may also be employed as financial agents of the Government; and they shall perform all such such reasonable duties, as depositaries of public money and financial agents of the Government, as may be required of them. And the Secretary of the Treasury shall require of the Federal land banks and joint stock land banks thus designated satisfactory security, by the deposit of United States bonds or otherwise, for the safekeeping and prompt payment of the public money deposited with them, and for the faithful performance of their duties as financial agents of the Government. No Government funds deposited under the provisions of this section shall be invested in mortgage loans or farm loan bonds.

POWERS OF FEDERAL LAND BANKS

SEC. 13. That every Federal land bank shall have power, subject to the limitations and requirements of this Act—

* * * * *

Fifth. To deposit its securities, and its current funds subject to check, with any member bank of the Federal Reserve System, and to receive interest on the same as may be agreed.

INVESTMENT IN FARM LOAN BONDS

SEC. 27. That farm loan bonds issued under the provisions of this Act by Federal land banks or joint stock land banks shall be a lawful investment for all fiduciary and trust funds, and may be accepted as security for all public deposits.

Any member bank of the Federal Reserve

APPENDIX C

System may buy and sell farm loan bonds issued under the authority of this Act.

Any Federal reserve bank may buy and sell farm loan bonds issued under this Act to the same extent and subject to the same limitations placed upon the purchase and sale by said banks of State, county, district, and municipal bonds under subsection (b) of section fourteen of the Federal Reserve Act approved December twenty-third, nineteen hundred and thirteen.

APPENDIX D

Section 7 of "An act to authorize an issue of bonds to meet expenditures for the national security and defense, and, for the purpose of assisting in the prosecution of the war, to extend credit to foreign governments, and for other purposes, approved April 24, 1917, which affects Federal Reserve Banks and member banks of the Federal Reserve System."

SEC. 7. That the Secretary of the Treasury, in his discretion, is hereby authorized to deposit in such banks and trust companies as he may designate the proceeds, or any part thereof, arising from the sale of the bonds and certificates of indebtedness authorized by this Act, or the bonds previously authorized as described in section four of this Act, and such deposits may bear such rate of interest and be subject to such terms and conditions as the Secretary of the Treasury may prescribe: *Provided*, That the amount so deposited shall not in any case exceed the amount withdrawn from any such bank or trust company and invested in such bonds or certificates of indebtedness plus the amount so invested by such bank or trust company, and such deposits shall be secured in the manner required for other deposits by section fifty-one hundred and fifty-three, Revised Statutes, and amendments thereto: *Provided further*, That the provisions of section fifty-one hundred and ninety-one of the Revised Statutes, as amended by the Federal Reserve Act and the amendments thereof, with reference to the reserves required to be kept by national banking

APPENDIX D

associations and other member banks of the Federal Reserve System, shall not apply to deposits of public moneys by the United States in designated depositories.

APPENDIX E

The "Pittman Act" of April 23, 1918, which provides for the substitution of federal reserve bank notes for silver certificates.

An Act to conserve the gold supply of the United States; to permit the settlement in silver of trade balances adverse to the United States; to provide silver for subsidiary coinage and for commercial use; to assist foreign governments at war with the enemies of the United States; and for the above purposes to stabilize the price and encourage the production of silver.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury is hereby authorized from time to time to melt or break up and to sell as bullion not in excess of three hundred and fifty million standard silver dollars now or hereafter held in the Treasury of the United States. Any silver certificates which may be outstanding against such standard silver dollars so melted or broken up shall be retired at the rate of \$1 face amount of such certificates for each standard silver dollar so melted or broken up. Sales of such bullion shall be made at such prices not less than \$1 per ounce of silver one thousand fine and upon such terms as shall be established from time to time by the Secretary of the Treasury.

SEC. 2. That upon every such sale of bullion from time to time the Secretary of the Treasury shall immediately direct the Director of the Mint to purchase, in the United States, of the product of mines situated in the United States and of reduction works so located, an

Silver
dollars to be
melted and
sold as bullion
and silver
certificates to
be retired.

amount of silver equal to three hundred and seventy-one and twenty-five hundredths grains of pure silver in respect of every standard silver dollar so melted or broken up and sold as bullion. Such purchases shall be made in accordance with the then existing regulations of the Mint and at the fixed price of \$1 per ounce of silver one thousand fine, delivered at the option of the Director of the Mint at New York, Philadelphia, Denver, or San Francisco. Such silver so purchased may be resold for any of the purposes hereinafter specified in section three of this Act, under rules and regulations to be established by the Secretary of the Treasury, and any excess of such silver so purchased over and above the requirements for such purposes, shall be coined into standard silver dollars or held for the purpose of such coinage, and silver certificates shall be issued to the amount of such coinage. The net amount of silver so purchased, after making allowance for all resales, shall not exceed at any one time the amount needed to coin an aggregate number of standard silver dollars equal to the aggregate number of standard silver dollars theretofore melted or broken up and sold as bullion under the provisions of this Act, but such purchases of silver shall continue until the net amount of silver so purchased, after making allowance for all resales, shall be sufficient to coin therefrom an aggregate number of standard silver dollars equal to the aggregate number of standard silver dollars theretofore so melted or broken up and sold as bullion.

SEC. 3. That sales of silver bullion under authority of this Act may be made for the purpose of conserving the existing stock of gold in the United States, of facilitating the settlement in silver of trade balances adverse to the United States, of providing silver for subsidiary coin

Equivalent
purchases of
silver to be
made by
Director of
Mint at fixed
price of \$1
per ounce.

age, and for commercial use, and of assisting foreign governments at war with the enemies of the United States. The allocation of any silver to the Director of the Mint for subsidiary coinage shall, for the purposes of this Act, be regarded as a sale or resale.

SEC. 4. That the Secretary of the Treasury is authorized, from any moneys in the Treasury not otherwise appropriated, to reimburse the Treasurer of the United States for the difference between the nominal or face value of all standard silver dollars so melted or broken up and the value of the silver bullion, at \$1 per ounce of silver one thousand fine, resulting from the melting or breaking up of such standard silver dollars.

Issue of
Federal
Reserve Bank
notes
authorized to
take place of
silver dollars
and silver
certificates
retired.

SEC. 5. That in order to prevent contraction of the currency, the Federal reserve banks may be either permitted or required by the Federal Reserve Board, at the request of the Secretary of the Treasury, to issue Federal reserve bank notes, in any denominations (including denominations of \$1 and \$2) authorized by the Federal Reserve Board, in an aggregate amount not exceeding the amount of standard silver dollars melted or broken up and sold as bullion under authority of this Act, upon deposit as provided by law with the Treasurer of the United States as security therefor, of United States certificates of indebtedness, or of United States one-year gold notes. The Secretary of the Treasury may, at his option, extend the time of payment of any maturing United States certificates of indebtedness deposited as security for such Federal reserve bank notes for any period not exceeding one year at any one extension and may, at his option, pay such certificates of indebtedness prior to maturity, whether or not so extended. The deposit of United States certifi-

cates of indebtedness by Federal reserve banks as security for Federal reserve bank notes under authority of this Act shall be deemed to constitute an agreement on the part of the Federal reserve bank making such deposit that the Secretary of the Treasury may so extend the time of payment of such certificates of indebtedness beyond the original maturity date or beyond any maturity date to which such certificates of indebtedness may have been extended, and that the Secretary of the Treasury may pay such certificates in advance of maturity, whether or not so extended.

SEC. 6. That as and when standard silver dollars shall be coined out of bullion purchased under authority of this Act, the Federal reserve banks shall be required by the Federal Reserve Board to retire Federal reserve bank notes issued under authority of section five of this Act, if then outstanding, in an amount equal to the amount of standard silver dollars so coined, and the Secretary of the Treasury shall pay off and cancel any United States certificates of indebtedness deposited as security for Federal reserve bank notes so retired.

Federal Reserve Bank notes to be retired when standard silver dollars are again coined from bullion purchased.

SEC. 7. That the tax on any Federal reserve bank notes issued under authority of this Act, secured by the deposit of United States certificates of indebtedness or United States one-year gold notes, shall be so adjusted that the net return on such certificates of indebtedness, or such one-year gold notes, calculated on the face value thereof, shall be equal to the net return on United States two per cent bonds, used to secure Federal reserve bank notes, after deducting the amount of the tax upon such Federal reserve bank notes so secured.

SEC. 8. That, except as herein provided, Federal reserve bank notes issued under author-

APPENDIX E

ity of this Act shall be subject to all existing provisions of law relating to Federal reserve bank notes.

SEC. 9. That the provisions of Title VII of an Act approved June fifteenth, nineteen hundred and seventeen, entitled "An Act to punish acts of interference with the foreign relations, the neutrality, and the foreign commerce of the United States, to punish espionage, and better to enforce the criminal laws of the United States, and for other purposes," and the powers conferred upon the President by subsection (b) of section five of an Act approved October sixth, nineteen hundred and seventeen, known as the "Trading with the Enemy Act," shall, in so far as applicable to the exportation from or shipment from or taking out of the United State of silver coin or silver bullion, continue until the net amount of silver required by section two of this Act shall have been purchased as therein provided.

INDEX TO FEDERAL RESERVE ACT AND ITS AMENDMENTS¹

SECTION

A

Acceptances:

By member banks in foreign transactions.....	13
By member banks in domestic transactions.....	13
By member banks to furnish dollar exchange.....	13
Purchase of, by Federal Reserve Banks.....	14
Rediscount of, by Federal Reserve Banks.....	13

Acts amended, repealed, or otherwise referred to:

Act of June 20, 1874	17, 20
Act of July 12, 1882	17
Act of January 16, 1883.....	11-1
Act of March 14, 1900.....	16, 26
Act of March 4, 1907.....	16
Act of May 30, 1908.....	16, 27
Act of March 2, 1911.....	16
Act of October 15, 1914.....	25
Act of June 12, 1916.....	16
United States Revised Statutes, 324.....	10
United States Revised Statutes, 5143.....	28
United States Revised Statutes, 5153.....	27
United States Revised Statutes, 5154.....	8
United States Revised Statutes, 5159.....	17
United States Revised Statutes, 5172.....	27
United States Revised Statutes, 5174.....	16
United States Revised Statutes, 5191.....	27
United States Revised Statutes, 5202.....	13
United States Revised Statutes, 5209.....	9
United States Revised Statutes, 5214.....	27
United States Revised Statutes, 5240....	9, 21

Agents. (*See* Federal Reserve Agent.)

Amendments, this act subject to.....	30
--------------------------------------	----

Applications:

For cancellation of stock.....	9
For establishment of foreign branches.....	25
For Federal Reserve notes.....	16
For membership in Federal Reserve Banks.....	4
Of State banks for membership.....	9

¹This index was compiled and officially published under the direction of the Federal Reserve Board. It has been slightly revised and extended to cover the year 1918 by the author.

	SECTION
Assessments. (<i>See</i> Federal Reserve Banks.)	
Assistants to Federal Reserve Agent.....	4
B	
Balances. (<i>See</i> Reserve).....	19
To be maintained with Federal Reserve Banks.....	13
Banks. (<i>See also</i> State Banks, Federal Reserve Banks, Member Banks, and National Banks.)	
Acceptance of terms of Federal Reserve act.....	2
Conversion of State banks into national banks.....	8
Definition	1
Federal Reserve Bank. (<i>See</i> Federal Reserve Banks.)	
Reserve banks defined.....	1
Bank acceptances (<i>see also</i> Acceptances), purchase of.....	14
Bank examinations. (<i>See</i> Examinations.)	
Bank reserves. (<i>See</i> Reserve.)	
Board:	
Definition	1
Federal reserve. (<i>See</i> Federal Reserve Board.)	
Bonds:	
Deposit requirement of national banks repealed.....	17
Exchange of 2 per cent for 3 per cent.....	18
Federal Reserve Agents.....	11-i
Federal Reserve Banks must purchase.....	18
Limitation on amount to be purchased.....	18
Notes against bonds purchased.....	18
Officers and employees of Federal Reserve Banks.....	4
Refunding	18
Repurchase of 1-year bonds from year to year.....	18
Revenue bonds, purchase by Federal Reserve Banks..	14
<i>See also</i> Federal Reserve Bank notes, and "Pittman Act," Appendix E.	
Branch banks of Federal Reserve Banks.....	3
C	
Capital stock. (<i>See</i> stock.)	
Central reserve cities:	
Classification by Federal Reserve Board.....	11-e
Previous status not changed.....	2
Reserves for banks in outlying districts of.....	19-c
Certifying checks against insufficient funds.....	9
Validity of checks certified against insufficient funds..	9
Clearing house:	
Federal Reserve Bank to act as.....	16
Federal Reserve Board may act as.....	16
Federal Reserve Board to fix charges.....	16
Collections:	
By Federal Reserve Banks.....	13
Expenses of	16

INDEX TO ACT

177

SECTION

Comptroller of Currency:	
Authorizing Federal Reserve Banks to commence business	4
Ex-officio member of Federal Reserve Board.....	10
D	
Demand deposits, definition.....	19
Deposits. (<i>See also</i> Government deposits.)	
Demand	19
Reserve against. (<i>See</i> Reserve.)	
Time	19
What deposits accepted by Federal Reserve Bank....	13
Deputy chairman:	
Appointment	4
Duties	4
Directors:	
Branch banks	3
Federal Reserve Bank—	
Appointment of Class C.....	4
Classes B and C not to be officers, directors, or employees of banks.....	4
Classification	4
Duties	4
Election of Classes A and B.....	4
Expenses	4
Nomination	4
Qualifications	4
Senators and Representatives ineligible.....	4
Term of office.....	4
Vacancies to be filled.....	4
Member banks—	
Fees or commission prohibited.....	22
Interest on deposits allowed.....	22
Member of Federal Reserve Board ineligible.....	10
Penalty for accepting fees or commissions.....	22
National banks, personal liability for noncompliance with the act.....	2
Removal of	11-f
Discounts:	
(<i>See also</i> Rediscounts.)	
Of member banks' own paper.....	13
Rate subject to regulation of Federal Reserve Board..	14
Federal advisory council to recommend rate.....	12
Dissolution:	
Effect	2
National bank, for failure to comply with the act....	2
Survival of remedies and penalties against dissolved bank	2

	SECTION
District:	
Definition	1
Federal Reserve. (<i>See</i> Federal Reserve District.)	
District reserve electors.....	4
Dividends, Federal Reserve Banks.....	7
E	
Earnings:	
Federal Reserve Banks, how distributed.....	7
Franchise tax on Federal Reserve Banks.....	7
Surplus fund of Federal Reserve Banks.....	7
United States earnings, how applied.....	7
Elections:	
Directors of Federal Reserve Banks.....	4
Emergency currency: Limitations of, act of May 30, 1908, extended to June 30, 1915.....	27
Examinations:	
Expenses	21
Federal Reserve Banks.....	21
Federal Reserve Board given power to examine all member banks	11-a
Member banks	21
Other visitatorial powers.....	21
Special examinations by Federal Reserve Bank.....	21
State banks	9
State examinations may be accepted.....	21
Examiners:	
Accepting loan or gratuity.....	22
Appointment	21
Disclosure of confidential information.....	22
Disqualification	22
Loans and gratuities must not be made to.....	22
Other services shall not be performed by.....	22
Penalty for accepting loan or gratuity.....	22
Penalty for disclosure of confidential information.....	22
Powers	21
Salary	21
Exchange:	
Not to be charged against Federal Reserve Banks.....	13
Not prohibited in certain cases.....	13
Regulated by Federal Reserve Board.....	13
Exemption of Federal Reserve Banks from taxation.....	7
F	
Farm lands. (<i>See</i> Loans on farm lands.)	
Federal Advisory Council:	
Creation	12

INDEX TO ACT

179

	SECTION
Members	12
Meetings	12
Powers	12
Vacancies, how filled.....	12
Federal Reserve Agent:	
Appointment	4
Assistants	4
Bond	11-i
Compensation	4
Deposits with	16
Deposits by, with Secretary of Treasury.....	16
Duties in general.....	4
Holding deposits required by Federal Reserve Act....	16
Holding money for redemption of Federal reserve notes	16
Notice to board of issuance and withdrawal of Federal reserve notes	16
Office	4
Qualifications	4
Redeposit of money deposited with him with Board or Treasurer	16
Reports	4
Federal Reserve Bank Notes.....	18
<i>See also "Pittman Act," Appendix E.</i>	
Federal Reserve Banks:	
Absence of chairman or deputy chairman.....	4
Accounts with other Federal Reserve Banks.....	14
Advances to members	13
Assessments by Federal Reserve Board for expenses..	10
Authority to commence business.....	4
Banks in Alaska and dependencies and possessions may become members	19
Board of directors. (<i>See also</i> Directors).....	4
Chairman of board of directors.....	4
Clearing and collection charges regulated by Federal Reserve Board	16
Clearing checks	16
Collections	13
Deposits	13
Deputy chairman of board of directors.....	4
Designation	2
Directors. (<i>See</i> Directors.)	
Discounts for member banks.....	13
Dividends	7
Exemptions from taxation.....	7
Fiscal agents	15
Forfeiture of membership in.....	9
Foreign accounts	14
Foreign agencies	14

	SECTION
Franchise tax	7
Information to be furnished Federal Reserve Board...	21
Initial capital	2
Liquidation	7
Location	2
Name	2
Officers, ineligibility of Senators and Representatives..	4
One in each reserve city.....	2
Open market operations.....	14
Organization	2
Powers	13
Rediscounts. (<i>See</i> Rediscounts.)	
Shareholders. (<i>See</i> Shareholders.)	
Special examinations of members.....	21
Stock. (<i>See</i> Stock.)	
Supervision by Federal Reserve Board.....	11-j
Surplus, additions to from net earnings.....	7
Surplus left upon liquidation goes to United States....	7
Suspension or liquidation by Federal Reserve Board...	11-h
Suspension or removal of officers and directors.....	11-f
Title	2
Weekly statement of conditions by Federal Reserve Board	11-a
Writing off doubtful assets.....	11-g
Federal Reserve Board:	
Additional limitations on farm loans.....	24
Allotment of refunding bonds.....	18
Annual report	10
Applications for cancellation of stock.....	9
Appointment of class C directors by.....	4
Appointment of Federal Reserve Agent by.....	4
Appointment of members.....	10
Approval of directors' compensation.....	4
Assessments against Federal Reserve Banks to pay expenses	10
Chairman, Secretary of Treasury ex officio.....	10
Clearing house may act as.....	16
Creation of new districts.....	2
Deposits with Secretary of Treasury subject to order of	16
Designation or requirement of Federal Reserve Bank to act as clearing house.....	16
Ex officio members.....	10
Expenses	10
Expenses of handling deposits with Secretary of Treasury	16
Expenses of money shipments.....	16
Federal Reserve notes, regulation of issue.....	16

INDEX TO ACT

181

	SECTION
First meeting	10
Governor—	
Appointment	10
Duties	10
Members—	
Appointment	10
Expenses	10
Ineligible for office or employment in member banks or with Federal reserve banks.....	10
No two from same district.....	10
Qualifications	10
Salary	10
Shall devote entire time to business of board.....	10
Term of office	10
Number of members	10
Offices	10
Powers	11
Powers in conflict with those of Secretary of Treasury	10
Readjustment of districts	2
Regulations—	
Charges for collections.....	16
Checking against reserve and member banks.....	19
Clearing-house activities	16
Dealings in commercial paper.....	13
Foreign branches	25
Rates of discount.....	14
Rediscounts	11-b, 13
Transfers of stock.....	2
Removal of Federal Reserve Bank officers or directors	11-f
Reports of	10
Representation by members of commercial, industrial, and geographical divisions of country.....	10
Representatives in Congress ineligible.....	4
Review of organization committee's determinations....	2
Secretary of Treasury ex officio chairman.....	10
Senators ineligible	4
Staff, employment and expenses of.....	11-1
Supervision of Federal Reserve Banks.....	11-j
Supervision of foreign accounts.....	14
Suspension of reserve requirements.....	11-c
Vacancies, how filled	10
Vice governor	10
Weekly statement of condition of Federal Reserve Banks	11-a
Federal reserve cities:	
Designation	2
Number	2

	SECTION
Review of organization committee's determination.....	2
Selection of	2
Federal reserve districts:	
Apportionment	2
Creation	2
Creation of new districts.....	2
Designation	2
Original number	2
Readjustment	2
Total number	2
Federal reserve notes:	
Additional security may be required.....	16
Cancellation and destruction	16
Collateral security	16
Custody, pending issue.....	16
Custody, plates and dies.....	16
Deposits against	16
Deposits with Treasurer to cover redemptions.....	16
Discretion of Board to grant application for issue....	16
Distinctive letter and number.....	16
Engraving and printing	16
Expenses of issue and retirement.....	16
Interest on	16
Issue	16
Lien on assets of bank.....	16
Must not be paid out by Federal Reserve Bank not is-	
suing them	16
Notice to Board of issues and withdrawals.....	16
Power of bank to issue.....	4
Purposes for which issued.....	16
Redemption of	16
Reduction of liability for.....	16
Reserve against	16
Retirement of	16
Return or retirement by another Federal Reserve Bank	16
Status as currency.....	16
Supervision and control of issue and retirement.....	11-d
Tax on deficiency in gold reserve.....	11-c
Withdrawal of collateral.....	16
Fiduciary powers, national banks.....	11-k
Foreign accounts, Federal Reserve Banks.....	14
Foreign agencies, Federal Reserve Banks.....	14
Foreign branches:	
Accounts kept separate.....	25
Agreement to comply with regulations of Federal Re-	
serve Board	25
Application to establish.....	25

INDEX TO ACT

183

Establishment	25
Failure to comply with regulations.....	25
Information must be furnished.....	25
Investigation by Federal Reserve Board of failure to comply with regulations.....	25
May be appointed fiscal agents of United States.....	25
National banks may establish.....	25
Officers or employees of member banks may serve....	25
Special examinations	25
Forfeitures. (<i>See</i> Penalties and forfeitures.)	
Franchise tax:	
Secretary of Treasury to maintain.....	26
Tax on deficiency	11-c

G

Government deposits:	
Funds to be deposited.....	15
In Federal Reserve Banks.....	15
In member banks.....	15
In non-member banks. (<i>See</i> Appendix D.)	

I

Inconsistent laws repealed.....	26
Invalidity of part of act not to invalidate all.....	29

L

Loans on farm lands:	
Amount	24
Limitations may be added by Federal Reserve Board.	24
National banks not in Central Reserve cities may make	24
Time to run.....	24

M

Member banks:	
Acceptances by	13
Banks in Alaska or other dependencies or possessions may become members.....	19
Cancellation of stock in Federal Reserve Bank upon insolvency	6
Definition	1
Discount of paper for directors, officers, or employees	22
Examinations of, by Federal Reserve Board.....	11-a
Fees or commissions to officers or directors for loans prohibited	22
Forfeiture of membership.....	9
Increasing capital stock must increase holdings of Fed- eral Reserve Banks' stock.....	5
Insolvency	6

Interest on deposits of officers, directors, or employees	22
Limitations on amount of deposits with nonmember banks	19
Loans or gratuities to bank examiners prohibited	22
Officers and employees may serve foreign branches	25
Reserves of. (<i>See</i> "Reserves")	19
Sale of bonds securing notes to be retired	18
Shall make no new loans or dividends while reserve not maintained	19
Shall not act as medium of nonmember banks in securing discounts from Federal Reserve Banks without consent of Federal Reserve Board	19
Stock in Federal Reserve Banks not to be transferred	5
Surrender of stock in Federal Reserve Banks upon reduction of its own capital or upon liquidation	5
Visitatorial powers to which subject	21

N

National banks:

Acceptance of terms of Federal Reserve Act	2
Bond deposit requirements repealed	17
Converted from State banks	8
Definition	1
Directors personally liable for results of noncompliance with act	2
Dissolution for noncompliance with act	2
Foreign branches. (<i>See</i> Foreign branches.)	
Indebtedness limited	13
Loans on farm lands	24
May act as insurance agent or broker, when	13
Penalty for failing to accept terms of act	2
Personal liability of stockholders	23
Reduction of capital stock	28
Subscription to capital stock of Federal Reserve Banks	2, 4
Survival of remedies and penalties against	2
Transfer of shares before failure	23
Trustees, executors, administrators, and registrars of stocks and banks	11-k
National Banking Association, definition	1
Notes. (<i>See</i> Federal Reserve notes.)	
Notes against bonds purchased:	
May be issued by Federal Reserve Banks	18
Issue and redemption	18
Limitations on amounts	18

O

Organization committee. (*See* Reserve bank organization committee.)

P

Penalties and forfeitures:

Certified checks against insufficient funds.....	9
Examiners disclosing confidential information.....	22
Failure of State bank to make reports.....	9
Forfeiture of membership.....	9
Loans or gratuities to examiners.....	22
Noncompliance with act.....	2
Penalty against Federal Reserve Bank for paying out notes of another.....	16
Survival of penalties against dissolved banks.....	2

Public stock:

Definition	2
Limitation of amount held by single shareholder.....	2
Subscription to	2
Transfer of	2

R

Rediscounts:

Acceptances	13
Agricultural paper	13
Conditions of	9
Limitations on amount.....	13
Limitations on amounts for State banks.....	9
Paper subject to.....	13
Regulation by Federal Reserve Board.....	11-b, 13

Remedies, survival against dissolved bank..... 2

Repayment of deposits upon withdrawal of State banks... 9

Reports:

By State banks.....	9
Federal Reserve Board. (<i>See</i> Federal Reserve Board.)	

Reserves:

Banks in Alaska, dependencies or possessions.....	20
Federal Reserve Bank—	
Against deposits	16
Against Federal reserve notes.....	16
Gold deposits may be counted as part of.....	16
How maintained	16
Member banks—	
Amount required	19
Computation of balances.....	19
How maintained	19
May be checked against.....	19
Limitation on amount deposited with nonmember bank	19
Must be maintained.....	19
Permission to carry in Federal reserve banks instead of in vault.....	11-m
Suspension of Reserve requirements by Federal Re- serve Board	11-c
Tax upon delinquencies	11-c

Reserve bank (<i>see</i> also Federal Reserve Bank), definition.	1
Reserve Bank Organization Committee:	
Allotment of United States stock.....	2
Calling meetings of bank directors.....	4
Certificates of designation of reserve districts and re- serve cities	4
Exercise functions of chairman of board of directors of Federal Reserve Banks pending organization.....	4
Expenses	2
Fixing geographical limits of districts.....	2
General powers	2
Offer of stock to public subscribers.....	2
Quorum	2
Supervision of organization of Federal Reserve Banks	2
Reserve cities:	
Control of classification by Federal Reserve Board....	11-e
Previous status not changed.....	2
Reserves required of banks in outlying districts of.....	19-b
S	
Secretary of Treasury:	
Deposits with, by Federal Reserve Bank or agent.....	16
Ex officio member of Federal Reserve Board.....	10
Expenses of handling deposits.....	16
Gold reserve to be maintained by.....	26
Management of United States stock.....	2
Shareholders (<i>see</i> also Stock), individual liability:	
Federal Reserve Banks.....	2
National banks	23
Silver certificates, substitution of federal reserve bank notes for, <i>see</i> "Pittman Act," Appendix E.	
State banks:	
Cancellation of stock in Federal Reserve Bank.....	9
Certificates as to liabilities of debtors.....	9
Certifying checks against insufficient funds.....	9
Conditions of membership.....	9
Converted into national banks.....	8
Depositories of government funds, <i>see</i> Appendix D.	
Eligibility for membership.....	9
Examination. (<i>See</i> "Examinations").....	9
Examinations, not subject to requirements of section 21	9
Forfeiture of membership.....	9
May become members of Federal Reserve Bank.....	9
Must be eligible for conversion into national banks...	9
Penalties for failure to make reports.....	9
Qualifications required to become members.....	9
Regulations	9
Retain powers under State charters.....	9
State examinations may be accepted.....	9, 21

Subject to provisions and penalties of Revised Statutes 5209, upon becoming members.....	9
Subject to section of Federal Reserve Act applied to member banks; but not subject to section 21.....	9
Subscription to stock in Federal Reserve Banks.....	9
Withdrawal from membership.....	9
Stock:	
<i>(see also Shareholders.)</i>	
Of Federal Reserve Banks—	
Amount to be held by single member or shareholder	2
Calls on subscriptions.....	2
Cancellation of stock held by insolvent member banks	6
Increase	5
Increase of subscriptions required on increase of member banks' capital stock.....	5
Limitation on cancellations.....	9
National banks must subscribe.....	2
Payments on subscriptions.....	2
Public subscriptions	2
Reduction	6
Shares owned by member banks not to be transferred	5
Subscription	2
Subscription by national banks.....	2, 4
Subscription by State banks.....	9
Subscription required of new members.....	5
Surrender upon reduction of capital or liquidation of member banks.....	5
Transfer of	2
Voting power	2
Of member banks—	
Increase	5
Reduction	5
Of national banks—	
Reduction	28
Transfer of before failure.....	23
Surplus. (<i>See</i> Federal Reserve Banks.)	

T

Tax upon delinquencies in reserves.....	11-c
Time deposits, definition.....	19
Trust companies, acceptance of terms of Federal Reserve Act	2
Trust powers of national banks.....	11-k

U

United States stock:	
Allotment by organization committee.....	2
Management by Secretary of the Treasury.....	9

INDEX TO TEXT

- Acceptances, trade acceptances and bank acceptances, may be purchased by federal reserve banks in open market, 42-44; may be rediscounted by federal reserve banks, 44-47. See also bank acceptances and trade acceptances.
- Advisory Council, how constituted, 33-34.
- Agricultural paper, eligible for rediscount at federal reserve banks, 62.
- Bank acceptances, nature of, 46-47; advantages of, 46-48; rediscountable by federal reserve banks, 47-48; use of, in connection with foreign trade, 79-80.
- Bank credit, extent to which used as a medium of exchange in 1913, 8-10.
- Bank note, bond-secured, under federal reserve law, 50-51; federal reserve bank note, 51. See also federal reserve note and bank reserves.
- Bank-note inelasticity, under old banking system, 11-17; seasonal, chart showing, 16.
- Branches of national banks, may be established in foreign countries 80-81.
- Canadian bank notes, elasticity of, compared with that of U. S. national bank notes, 14-16.
- Capital of federal reserve banks, minimum amount of, 29; amount paid-in, 31; how subscribed, 31.
- Centralization of bank reserves in respective federal reserve districts, 35-38.
- Central reserve city banks, reserve requirements of, 37.
- Class A directors of federal reserve banks, who and how elected, 32.
- Class B directors of federal reserve banks, who and how elected, 32-33.
- Class C directors of federal reserve banks, who and how chosen, 32-33.
- Clearing-member banks, defined, 70.
- Clearing out-of-town checks, under old banking system, 19-23; under federal reserve system, 70-75; cost of, how met, 73-74; system extended to cover promissory notes, trade bills, time drafts and similar items, 74-75; services rendered by system, 78.
- Collateral loans, character of, which may be made by federal reserve banks, 63-64.

- Collection of out-of-town checks. See clearing out-of-town checks.
- Commercial paper, creation of a broader discount market for, 44-48; kinds of, eligible for rediscount by federal reserve banks, 61-62.
- Comptroller of the currency an ex-officio member of federal reserve board, 33.
- Contractility of circulating credit under federal reserve system, 64-65.
- Country banks, reserve requirements of, 37.
- Credit elasticity under federal reserve system, 50-65.
- Credit inelasticity under old banking system, evil results of, 18.
- Currency shipments, heavy under old banking system, 22-23; may be made by member banks, at expense of federal reserve banks, to settle adverse balances arising out of clearing and collection system, 72.
- Decentralization of American banking prior to federal reserve system, 3-7.
- Defects of old banking system summarized, 2.
- Deposit currency, inelasticity of, under old system, 17; elasticity of, under federal reserve system, 57-65.
- Deposit-turnover, rate of, in 1913, 9-10.
- Depositories, government, apportionment of funds among, under old banking system, 25-27; use of federal reserve banks as, 82-87; use of individual banks as, during war, 87.
- Directors of federal reserve banks, classes of, 32-33.
- Discount market, a broader one being created by federal reserve system, 44-48.
- Discount rates of federal reserve banks, how made effective, 42n; tendency of, to equilibrium throughout country, 43-44.
- Domestic exchange under federal reserve system, 66-78.
- Earnings of federal reserve banks, their distribution, 59.
- Elasticity, credit, under old banking system, 8-18; under federal reserve system, 50-65. See also bank-note inelasticity and deposit-currency inelasticity.
- Exchange and transfer system, defective prior to federal reserve system, 19-24; under federal reserve system, 66-81.
- Exchange charges, formerly imposed by federal reserve banks on member banks to cover expenses of clearing and collection system, 73; discontinued in 1918, 73; reasonableness of exchange charges of member banks and clearing member banks to be determined by federal reserve board, 74.
- Federal reserve agent, position of, 33.
- Federal reserve agents' fund, described, 76.
- Federal reserve bank agencies in foreign countries, 80.
- Federal reserve banks, capital stock of, 31; subscriptions to, re-

- suired of member banks, 31; plan of organization of, 31-33; the sole depositaries of member banks' legal reserve money, 35-38.
- Federal reserve bank notes, described, 51.
- Federal reserve board, how constituted, 33-34; powers of, 34-35; may permit reserve held against federal reserve notes to fall below 40 per cent in times of emergency, 53-54; must impose a deficiency tax when reserve falls below 40 per cent, 53; may suspend for brief periods, in times of emergency, all reserve requirements of act, 53-54; may impose a special rate of interest on issues of federal reserve notes uncovered by gold, 56.
- Federal reserve clearing and collection system, 70-78.
- Federal reserve districts, how determined, 28-29; map of, 30.
- Federal reserve notes, described, 51-52; collateral eligible for, in hands of federal reserve agent, 51-52; gold reserve required against, 52; elasticity of, 52-57; legal minimum reserve for, may be reduced in time of emergency, on payment of a graduated deficiency tax, 53; amount of, outstanding, and character of collateral held against, 54; possibility of further expansion of, 54-55; of one federal reserve bank may not be paid out by another, 55-56; machinery for contracting circulation of, question of its adequacy, 55-57.
- Fiscal agents of Government, federal reserve banks serve as, 88; render valuable services as, in war financing, 88.
- Fisher, Irving, cited, 9, 57.
- "Float," how handled under old banking system, 20-22; evils of, largely eliminated by federal reserve clearing and collection system, 72-73, 78.
- Foreign agencies established by federal reserve banks, 80.
- Foreign branches of American national banks established, 80-81.
- Foreign exchange, difficulties with, prior to federal reserve system, 23-24; under federal reserve system, 79-81; services with reference to, rendered by federal reserve system, 79-81.
- Gold, amount of, held against federal reserve note issues, 54.
- Gold reserve required against federal reserve notes, may be reduced in time of emergency, 53-54.
- Gold settlement fund, described, 75-76.
- Government, old banking system ill adapted to fiscal needs of, 25-27; participation of, in profits of federal reserve banks, 59.
- Government depositaries, federal reserve banks serve as, 82-86; banks which serve as, under war conditions, 86-87.
- Inelasticity of bank notes under old banking system, 11-17; charts showing, 14-15.
- Inelasticity of credit under old banking system, 8-18; evil results of, 18.
- Inelasticity of deposit credit under old banking system, 17.
- Interest, a special rate of, may be imposed by federal reserve

- board on issues of federal reserve notes uncovered by gold, 56.
See also discount rates.
- Kinley, David, cited, 9.
- Leadership, absence of, for country's banks in times of emergency prior to federal reserve act, 3-4.
- Legal reserve, see reserves.
- Liberty bond financing by federal reserve banks, 88; extensive use of collateral loans in, 63-64.
- Live-stock paper eligible for rediscount at federal reserve banks, 62.
- London, the financing of a declining proportion of our foreign trade through, as a result of federal reserve system, 79-81.
- Membership in federal reserve system, 29-31; importance of, in time of war, 88-90; President Wilson urges on non-member banks as a patriotic duty, 89-90.
- Member banks must purchase stock in federal reserve bank, 31; are grouped into three classes for electing federal reserve bank directors, 32.
- Mobility of reserves, inter-district, 39-48; intra-district, 48-49.
- Mobilization of reserves under federal reserve system, 38-39.
- National banks, as depositaries of government funds, 26-27; must join federal reserve system, 29.
- National bank notes under federal reserve law, 50-51.
- Open-market operations of federal reserve banks, 42-44.
- Out-of-town checks, see clearing and collection system, "float," and "routing of checks."
- Par-clearing and collection system, description of, 70-75; membership in, 70.
- Profits of federal reserve banks, how distributed, 59.
- Promissory notes, collectible under federal reserve clearing and collection system, 74-75.
- Rediscounting, negligible under old banking system, 17; by one federal reserve bank for another, the law, 39-40; the practice, 41-42; by federal reserve banks, kinds of paper eligible for, 61-63; facilities for, at federal reserve banks, not open to paper drawn for dealing in stocks or bonds (other than U. S. government bonds), 62-63.
- Reserve, gold, required against federal reserve notes, may be reduced in time of emergency, 53-54.
- Reserve agents, national banks discontinued as, by federal reserve law, 35-37.
- Reserve city banks, reserve requirements of, 37.
- Reserves, cash, importance of, in old banking system, 4; scattered prior to federal reserve system, and therefore ineffective, 4-7; immobile under old banking system, 7; deposited in reserve and central reserve city banks difficult to realize upon, in times of emergency, 4-7; district centralization of, under federal reserve

- system, 35-38; legal, percentages required of member banks, 37; mobilization of, under federal reserve system, 38-39; of member banks, legal, must all be kept on deposit in federal reserve banks, 35-38; inter-district, mobility of, 39-48; legal, against deposits of federal reserve banks, 58-59; intra-district, mobility of, 48; legal, requirements for, less rigid under federal reserve law than formerly, 58; legal, against federal, reserve deposits, may be reduced in times of emergency, 60; of member banks, how increased by rediscounting with federal reserve banks, 61-63.
- Routing of checks, under old régime, 21-22; how practice padded reserves, 21-22; evils of, largely eliminated by federal reserve system, 73, 78.
- Secretary of Treasury, difficult task of, of apportioning government funds among depositories, under old banking system, 26-27; an ex-officio member of federal reserve board and chairman, 33.
- Speculation, paper used for, not rediscountable or purchaseable by federal reserve banks, 62-63.
- State banks and trust companies, may join federal reserve system, 29; urged by President Wilson to join system as a patriotic duty, 88-90.
- Sterling bills, decline in relative importance of, as compared with bills drawn in dollars, 79-80.
- Subtreasuries as depositories of government funds, 25-26.
- Surplus of federal reserve banks, manner of accumulation, and size, 59.
- Tax, graduated deficiency, on reserve held against federal reserve notes, 53; graduated, to be imposed upon deficiency in legal reserve against deposits of federal reserve banks, 60.
- Trade acceptances, 45-46.
- Trade bills collectible under federal reserve clearing and collection system, 74-75.
- United States Government bonds and notes, paper used for purchasing, rediscountable at federal reserve banks, 62. See also government.
- Willis, H. Parker, cited, 68.
- Wilson, President, appeals to non-member banks to join federal reserve system as a patriotic duty, 88-90.

